ANNUAL REPORT

ON THE STATUS OF LAND USE ON OAHU

Fiscal Year 2020

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ACRONYMS AND ABBREVIATIONS

ACS	American Community Survey
AMI	Area Median Income
C/P	Committed or Proposed Projects
DBEDT	State Department of Business, Economic Development, and Tourism
DHHL	Department of Hawaiian Home Lands
DP	Development Plan
DPA	Development Plan Area
DPSA	Development Plan Sub Area
DPP	Department of Planning and Permitting
FY	Fiscal Year (July through June)
GP	General Plan
HHPS	Hawaii Housing Planning Study
HPHA	Hawaii Public Housing Authority
MF	Multi-Family
MOE	Margin of Error
NUC	Nonconforming Use Certificate
PIM	Public Infrastructure Map
PUC	Primary Urban Center
SCP	Sustainable Communities Plan
SF	Single Family
STR	Short Term Rental
UA	Unilateral Agreement

EXECUTIVE SUMMARY

This report updates the *2019 Annual Report on the Status of Land Use on Oahu* to Fiscal Year (FY) 2020, which covers the period July 1, 2019 to June 30, 2020.

It should be noted that this time period extends into the first four months of the COVID-19 pandemic. Also, the survey of developers on their proposed projects was conducted in early 2021. Thus, their views of the future, beyond June 30, 2020, as presented in this report can be said to have accounted for the social and economic disruptions that have occurred during the pandemic. It appears that the COVID-19 pandemic has not significantly changed the future plans of major developers.

A. HOUSING UNITS

There was a slight increase in the number of housing units identified (built or planned) since 2019. In the FY 2019 Annual Report, 189 projects were identified, involving 96,190 housing units across Oahu. In comparison, this report identifies 200 projects with a total of 101,187 housing units – an increase of 4,997 housing units.

B. HOUSING COST BURDEN

The impact of housing costs on the lives and well-being of households in the City and County of Honolulu was measured by computing the cost burden borne by households in different income levels. The average cost burden of households estimated for each income level, and their respective margins of error, are shown over two time periods. It can be seen that upper income households fared best, paying less than a quarter of their income for housing. Their cost burden in fact improved over time, dropping two percentage points from 24 percent to 22 percent, which is statistically significant. Moderate income households also fared well, paying well within their margin of error, about 33 percent of their income for housing. This cost burden did not change significantly over time, declining by one percentage point. Cost burden is most onerous for low income households, i.e., those with income at or below 80 percent of Honolulu's median. These households pay on average 50 percent of their income for housing, which is considered a severe cost burden. This cost burden also did not change significantly over time, increasing by one percentage point over the past decade.

INCOME LEVEL (% of Oahu Median Income)	2006-2010		2015-2019	
	AVERAGE COST BURDEN	MARGIN OF ERROR	AVERAGE COST BURDEN	MARGIN OF ERROR
Low (80% or below)	49%	±0.95%	50%	±0.77%
Moderate (greater than 80% to 120%)	34%	±0.73%	33%	±0.59%
Upper (greater than 120%)	24%	±0.34%	22%	±0.27%

SOURCE: American Community Survey 5-Year Public Use Microdata Sample, 2006-2010 and 2015-2019

C. LONG AND SHORT TERM ASSESSMENTS

Long-term housing capacity continues to be in excess of demand by the year 2050. This report shows a decrease in excess capacity compared to last year (4,000 units compared to 7,300 units). It should be noted, that previous reports computed a value for unknown projects, or "total market" production. For this FY 2020 Annual Report, the availability of increased information for projects by small developers made it unnecessary to increase the known project data to reflect the total market.

EXCESS CAPACITY (BY YEAR 2050)	
As of FY 2019	7,300
As of FY 2020	4,000

However, a shortage still exists in the short-term for affordable housing units. The housing shortage in 2020 is slightly larger than in FY 2019 due to delays that various projects have experienced over the past year. Both reports show that the shortage by 2027 is in primarily affordable units, as opposed to market-rate units. As of FY 2020, a shortage of 11,300 affordable housing units is anticipated by 2027, of which 62 percent are units for households earning 80 percent or below of the Area Medium Income (AMI).

CHARACTERISTIC	HOUSING SHORTAGE			
	As of FY 2019		As of FY 2020	
	2019	By 2027	2020	By 2027
Total	9,750	10,630	10,980	13,600
Structure Type				
Single-Family	6,250	4,500	5,220	7,480
Multi-Family	3,500	6,120	5,760	6,130
Tenure				
Own	5,690	6,260	5,640	9,020
Rent	4,060	4,360	5,340	4,590
Affordability				
80% AMI or Below	5,480	5,850	7,760	7,010
80% - 120% AMI	1,940	3,080	1,710	4,290
Subtotal: 120% AMI or Below	7,420	8,930	9,470	11,300
120% - 140% AMI	1,700	2,810	670	2,220
Market-Rate (over 140% AMI)	640	-1,110	840	90

This conclusion should be viewed more as the logical consequence of the supply and demand assumptions made in this report. To the extent that these assumptions are wrong, the magnitude of the estimated shortage will be different. The reality is that a housing shortage is certain to exist in some form on Oahu because of structural reasons such as limited land, geographic isolation, global demand, and income inequality.

INTRODUCTION

This *Annual Report on the Status of Land Use on Oahu* reviews land use in the context of the planning system set in place by State law and the Revised Charter of the City and County of Honolulu (Charter). The planning system begins with the classification of all lands into use districts to reflect the broad interest of the State. The counties direct their planning efforts at lands in the State Urban District (and since 1986, also at lands under 15 acres in other districts). To guide planning on Oahu, the Charter mandates the preparation of a General Plan (GP) and a set of regional plans to implement the objectives and policies of the GP. This report is required by Section 6-1503(d) of the Charter.

The GP was adopted in 1977 and has undergone a number of revisions. Eight regional plans have been adopted, the first in 1997, and revisions have either been adopted or are underway. These regional plans are called Development Plans (DPs) for the two areas where growth is encouraged and Sustainable Communities Plans (SCPs) for the remaining six areas. To avoid unnecessary verbiage, all eight regional plans are referred to in this report generically as DPs - the term used in the Charter.

The goal of this report is to provide meaningful measures of progress on how each DP is moving toward its envisioned future. The emphasis is on the physical development of the island in each of the eight regions, referred to as Development Plan Areas (DPAs). As such, this report provides data on population trends, housing construction activities, land use approvals, and other aspects of land use that are mandated by the Charter. Specific tables include: (1) the existing and projected population, visitor units, housing units, and jobs by DPA; (2) the progress being made on known housing developments; and (3) revisions to the DPs and selected land use approvals.

This information is intended to help the City Council, other elected officials, government agencies, the development community, and interested citizens understand how growth is occurring and how the development objectives of the City and County of Honolulu are being met. It also helps infrastructure agencies with their long-range planning.

This report updates the FY 2019 Annual Report (published in December 2019). It updates data to FY 2020, which ended on June 30, 2020. All data up to that date is regarded as actual events, and all remaining data as estimates. In addition, all references to “year” are intended to mean fiscal year, unless otherwise indicated as calendar year, which ends on December 31.

The report is organized into three chapters as follows:

Chapter I: Land Use and Population

This chapter provides geographic summaries of land use and population characteristics as follows:

1. The amount of land on Oahu in each State Land Use District and how they changed over time;

2. Demographic and household characteristics tabulated by DP subarea and by neighborhood area based on the American Community Survey for the period 2015-2019;

3. The distribution by DPA of the existing population on Oahu for each decade from 1980 through 2010; and

4. Growth projections by DPA of resident population for the years 2020, 2025, and 2040. The City's population distribution guideline, stated in the GP for the year 2025, is also shown for comparison with actual and projected future conditions.

Chapter II: Housing Supply and Demand

This chapter examines the supply and demand aspects of housing. The long-range demand projection is derived and explained. Supply projections are determined from known projects based on a survey of developers, as supplemented by public announcements, permit applications, and adopted unilateral agreements. Affordable housing is separately discussed. An assessment of how housing supply compares with housing demand in each DPA on Oahu is presented.

Chapter III: Land Use Planning and Approvals

This chapter reports on the following:

1. The status of reviews and revisions to the City's eight DPs; and

2. Specific changes to entitlements such as rezoning and State Land Use District boundary amendments.

CHAPTER I: LAND USE AND POPULATION

This Chapter examines land use from a broad perspective. Hawaii's overall land use management system begins with the process established by the State Land Use Law in 1961 (Chapter 205, Hawaii Revised Statutes). All lands are classified into one of four districts. Amendments to the boundaries of these districts are made from time to time to reflect the changing policy needs of the State. The City and County of Honolulu begins its land use stewardship by establishing growth policies in the GP in terms of the geographic distribution of the future population. DPs are then prepared, as mandated by the City Charter, for individual planning regions to implement these growth policies. Based on the policies promulgated in these plans, the Department of Planning and Permitting (DPP) generates geographically detailed projections or forecasts of the future population. These population forecasts are used to measure how well the DPs implement the growth policies of the GP.

These population forecasts also serve as the common basis for the planning of all infrastructure on Oahu, including roads, sewer and water, to ensure that they are mutually consistent and conform to the overall growth objectives of the City and State.

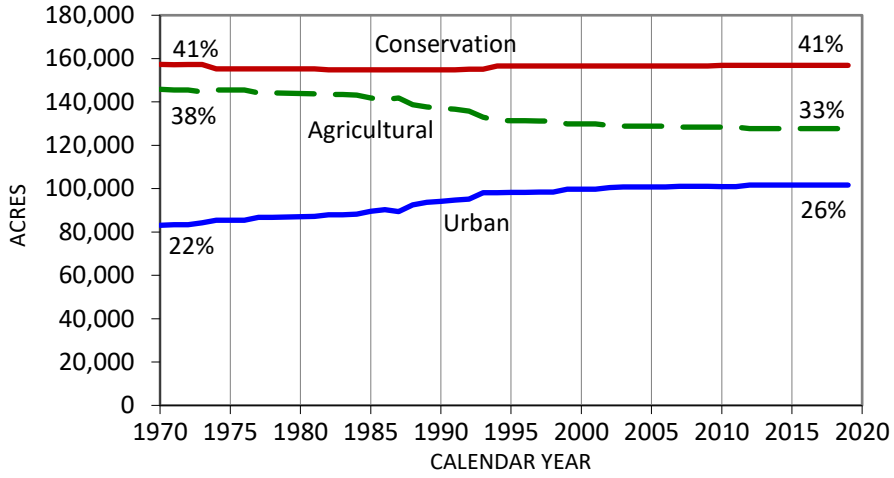
A. STATE LAND USE

The State Land Use Commission classifies all lands in Hawaii into four districts. On Oahu only three districts apply: Urban, Agricultural, and Conservation. **FIGURE I-1** shows the amount of land on Oahu in each of these districts from 1970 to 2019. Also shown for 1970 and 2019 are the percentages these acreages represent of the island's total land area. In 1970, 22 percent of land on Oahu was classified as Urban; by 2019, the share of lands in the Urban district has increased steadily to 26 percent. Agricultural lands declined correspondingly, from 38 percent to 33 percent. Conservation lands remained steady at 41 percent. As of this writing, data is not available for 2020.

These shifts result from boundary amendments that occur from time to time. **TABLE I-1** tabulates the cumulative changes from 1970 for each district. In the past 40-plus years, the Urban district gained over 18,500 acres, basically at the expense of a loss of over 18,100 acres of Agricultural lands. Conservation lands stayed basically the same.

This expansion of urban land is a reflection of a population that increased by more than half in the same 40-year period.

FIGURE I-1: STATE LAND USE DISTRICT ACREAGE (1970 - 2019)



% = % of Oahu land area total

TABLE I-1: STATE LAND USE DISTRICTS CUMULATIVE CHANGE FROM 1970 (IN ACRES)

Calendar Year	Urban	Agricultural	Conservation
1975	2,293	-295	-1,999
1980	3,962	-1,949	-2,013
1985	6,408	-3,986	-2,422
1990	11,111	-8,693	-2,418
1995	15,125	-14,479	-646
2000	16,597	-15,951	-646
2005	17,641	-16,996	-645
2006	17,675	-17,025	-650
2007	18,020	-17,370	-650
2008	18,020	-17,370	-650
2009	18,020	-17,370	-650
2010	17,805	-17,370	-435
2011	17,805	-17,370	-435
2012	18,572	-18,137	-435
2013	18,572	-18,137	-435
2014	18,572	-18,137	-435
2015	18,572	-18,137	-435
2016	18,572	-18,137	-435
2017	18,572	-18,137	-435
2018	18,572	-18,137	-435
2019	18,572	-18,137	-435

SOURCE: State Land Use Commission
As of this writing, data is not available for 2020.

B. CURRENT POPULATION AND HOUSEHOLD ESTIMATES

The United States (U.S.) Census is conducted once every ten years to provide a complete count of the entire population. As of this writing, data from the 2020 Census is not yet available. To provide more current data and greater details, the American Community Survey (ACS) is conducted once a year on a sample of the population.

Because the ACS estimates are based on a sample of the population, uncertainty is inherent in the data. Margins of error (MOE) are provided for each ACS estimate. An MOE is a measure of the possible variation in the estimate around the estimated value. In other words, MOEs are an indicator of the reliability of an estimate – an upper-bound and a lower-bound of a range provided by the Census. The estimate is the midpoint of the range, or confidence interval. A confidence level of 90 percent is the Census Bureau standard.

Summaries of selected ACS estimates are located in **APPENDIX A.** The summaries cover each of the eight DP areas, sub-areas within the DP areas, and the neighborhood areas for the period 2015-2019. The tables by DPA and DP subarea contain summaries as follows:

- **TABLE A-1:** Population, housing units, households, and median income;
- **TABLE A-2**: Housing units, tenure, and vacancy rates;
- **TABLE A-3**: Population by age and sex; and
- **TABLE A-4**: Race based on those who selected one race only.

The tables by neighborhood area contain summaries as follows:

- **TABLE A-5**: Population, housing units, households, and median income;
- **TABLE A-6**: Housing units, tenure, and vacancy rates;
- **TABLE A-7**: Population by age and sex; and
- **TABLE A-8**: Race based on those who selected one race only.

C. POPULATION TRENDS AND GENERAL PLAN POLICY

Population distribution is a specific concern of the GP. The GP policy for population distribution is set forth in Population Objective C, which contains four policies for the attainment of a population distribution that *"will allow the people of Oahu to live and work in harmony."*

The first three policies lay out the directed growth policy of the City and County of Honolulu. This fundamental policy, which has remained essentially intact since the GP was first adopted in 1977, aims to: (1) promote the full development of the Primary Urban Center (PUC); (2) encourage growth in the secondary urban center at Kapolei and in the urban fringe areas in Ewa and Central Oahu to meet housing needs not available in the PUC; and (3) discourage significant growth in the remaining urban fringe and rural areas of Oahu. The fourth policy of Population Objective C is a table of percentages depicting the population distribution on Oahu among the eight DPAs for the year 2025. These percentages are provided to guide the implementation of the directed growth policy. They are intended to serve as "markers" to measure how well the directed growth policy is being achieved in the City's plans.

In March 2012, the State Department of Business, Economic Development, and Tourism (DBEDT) released its latest series of population and economic projections for the counties in 5-year increments to the year 2040. Based on this projection series, the DPP projected the likely population distribution among the eight DPAs, taking into account: (1) the most recent GP population policy, (2) the potential for housing in accordance with the land use policies given in each area's DP or SCP; (3) the progress being made on known developments, and (4) realistic expectations of Oahu's future housing market and economy.

The population projections for the years 2020, 2025, and 2040 are shown in **TABLE I-2**, along with the actual population counts from the 1980, 1990, 2000, and 2010 U.S. Census. The population numbers are given in the bottom portion while the percentage breakdown by DPA is given on top. The Policy 4 population percentages by DPA for the year 2025 are also shown.

The results shown in **TABLE I-2** are presented graphically in **FIGURE I-2**. Each group of bars shows the changing population shares of a DPA in 5-year intervals from 2000 to 2040. Superimposed on the graph are the GP markers, which are shown as a black line over the bar for the year 2025. The graph shows clearly that all the planning areas are trending in the direction envisioned by the GP, except for Waianae, whose population share is expected to remain markedly above its marker well into the distant future. The graph also shows that the PUC population share is expected to decline faster than the GP vision, while Ewa's share is expected to increase faster. The other areas are essentially "on target" with respect to approaching the markers laid out by the GP.

Projections of visitor units, housing units, and jobs corresponding to the population projections are shown in **TABLE I-3**. Visitor units are defined as any housing units intended for visitor accommodation. They include hotels, condo hotels, bed and breakfasts, and timeshares.

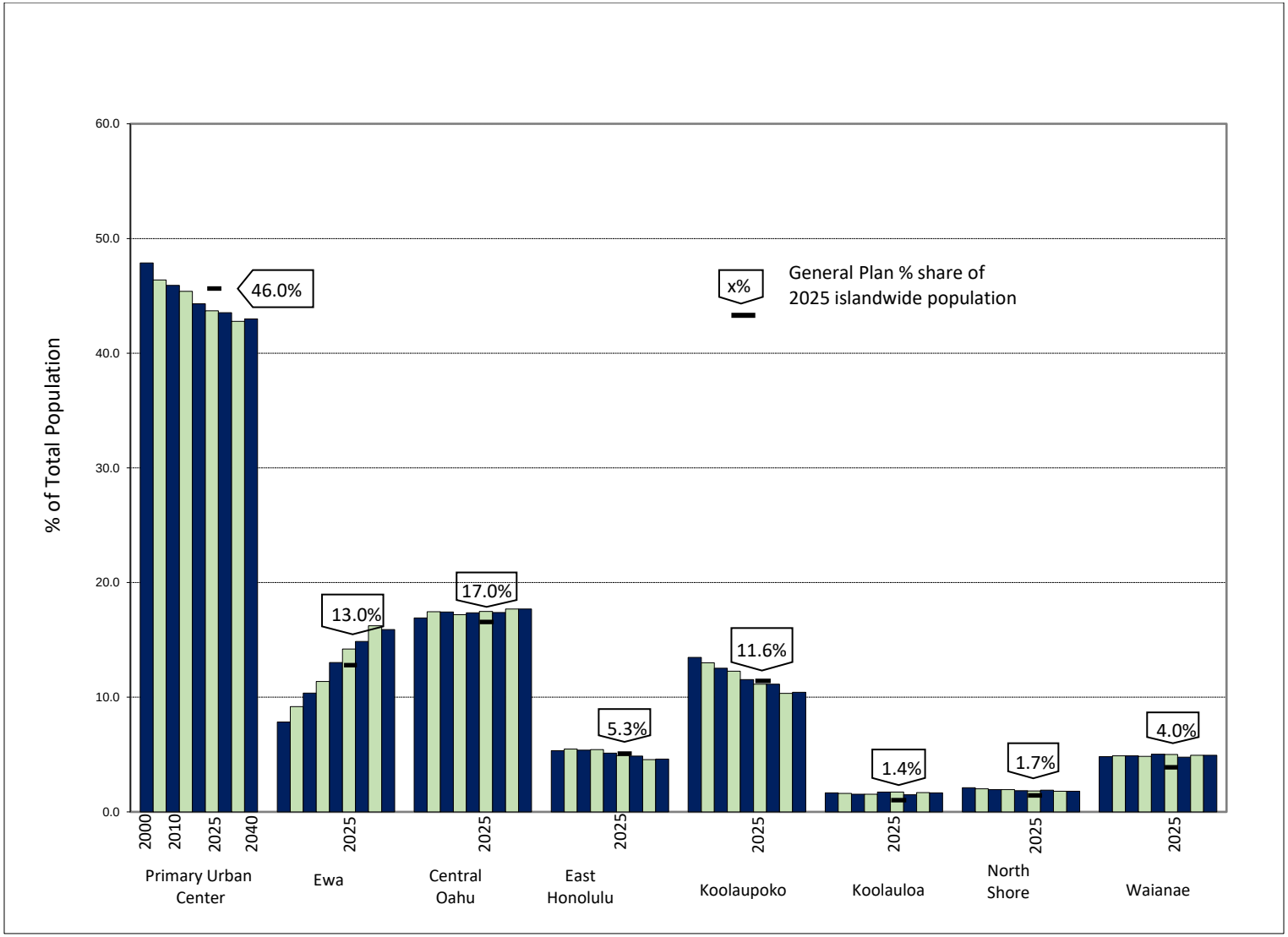
TABLE I-2: POPULATION DISTRIBUTIONS

DEVELOPMENT PLAN AREA	PERCENT OF ACTUAL POPULATION TOTAL				PERCENT OF PROJECTED POPULATION TOTAL			GENERAL PLAN PERCENTAGE FOR 2025[1]
	1980	1990	2000	2010	2020	2025	2040	
Primary Urban Center	54.7%	51.7%	47.9%	45.6%	44.3%	43.7%	43.0%	46.0%
Ewa	4.7%	5.1%	7.8%	10.6%	13.0%	14.2%	15.9%	13.0%
Central Oahu	13.3%	15.6%	16.9%	17.7%	17.4%	17.5%	17.7%	17.0%
East Honolulu	5.7%	5.5%	5.3%	5.2%	5.1%	4.9%	4.6%	5.3%
Koolau Poko	14.3%	14.1%	13.5%	12.1%	11.5%	11.1%	10.4%	11.6%
Koolau Loa	1.4%	1.7%	1.7%	1.8%	1.7%	1.7%	1.7%	1.4%
North Shore	1.7%	1.9%	2.1%	1.9%	1.9%	1.8%	1.8%	1.7%
Waianae	4.1%	4.5%	4.8%	5.1%	5.0%	5.0%	4.9%	4.0%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
	ACTUAL POPULATION				**PROJECTED POPULATION**			
Primary Urban Center	417,240	432,023	419,333	435,118	444,800	449,900	467,100	
Ewa	35,523	42,931	68,696	101,397	130,700	146,100	172,700	
Central Oahu	101,685	130,526	148,208	168,643	174,400	180,000	192,400	
East Honolulu	43,213	45,654	46,735	49,914	51,500	50,600	50,000	
Koolau Poko	109,373	117,694	117,999	115,164	115,900	114,600	113,300	
Koolau Loa	10,983	14,263	14,546	16,732	17,400	17,700	18,100	
North Shore	13,061	15,729	18,380	17,720	18,600	18,900	19,600	
Waianae	31,487	37,411	42,259	48,519	50,500	51,600	53,600	
TOTAL	**762,565**	**836,231**	**876,156**	**953,207**	**1,003,700**	**1,029,400**	**1,086,700**	

NOTE: Parts may not sum to totals because of rounding.
SOURCE: U.S. Census; Department of Planning and Permitting

[1] General Plan (www.honoluludpp.org/Planning/GeneralPlan.aspx) Population Objective C, Policy 4

FIGURE I-2: POPULATION TRENDS VS. GENERAL PLAN POLICY



NOTE: Column shadings alternate to improve visibility.

TABLE I-3: GROWTH PROJECTIONS BY DP AREA

DEVELOPMENT PLAN AREA	RESIDENT POPULATION								VISITOR UNITS							
	Number				Share				Number				Share			
	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040
Primary Urban Center	435,118	444,795	449,881	467,074	46%	44%	44%	43%	30,961	26,457	27,364	30,117	92%	76%	76%	76%
Ewa	101,397	130,702	146,096	172,679	11%	13%	14%	16%	1,154	6,323	6,541	7,198	3%	18%	18%	18%
Central Oahu	168,643	174,351	179,984	192,369	18%	17%	17%	18%	212	177	183	202	1%	1%	1%	1%
East Honolulu	49,914	51,514	50,627	49,985	5%	5%	5%	5%	370	310	320	352	1%	1%	1%	1%
Koolau Poko	115,164	115,868	114,626	113,258	12%	12%	11%	10%	68	58	60	71	0%	0%	0%	0%
Koolau Loa	16,732	17,427	17,704	18,104	2%	2%	2%	2%	586	1,230	1,272	1,218	2%	4%	4%	3%
North Shore	17,720	18,570	18,906	19,641	2%	2%	2%	2%	28	23	25	27	0%	0%	0%	0%
Waianae	48,519	50,480	51,590	53,589	5%	5%	5%	5%	217	181	187	206	1%	1%	1%	1%
OAHU TOTAL	**953,207**	**1,003,700**	**1,029,400**	**1,086,700**	**100%**	**100%**	**100%**	**100%**	**33,596**	**34,800**	**36,000**	**39,400**	**100%**	**100%**	**100%**	**100%**
Annual Growth Rate		0.3%	0.3%	0.5%						0.2%	0.3%	0.9%				

DEVELOPMENT PLAN AREA	HOUSING UNITS								TOTAL JOBS							
	Number				Share				Number				Share			
	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040	2010	2020	2025	2040
Primary Urban Center	174,569	184,343	189,377	204,112	52%	51%	50%	49%	437,011	458,299	473,329	493,054	73%	71%	71%	68%
Ewa	30,726	40,899	46,425	57,505	9%	11%	12%	14%	28,294	44,567	46,028	73,607	5%	7%	7%	10%
Central Oahu	50,998	54,482	57,168	63,679	15%	15%	15%	15%	56,174	64,965	67,095	78,524	9%	10%	10%	11%
East Honolulu	18,774	19,991	19,945	20,283	6%	5%	5%	5%	10,252	10,357	10,696	10,406	2%	2%	2%	1%
Koolau Poko	36,894	38,328	38,477	39,154	11%	11%	10%	9%	46,181	47,271	48,822	47,578	8%	7%	7%	7%
Koolau Loa	4,884	5,262	5,432	5,756	1%	1%	1%	1%	7,316	8,287	8,558	9,144	1%	1%	1%	1%
North Shore	6,678	7,228	7,478	8,011	2%	2%	2%	2%	5,888	6,055	6,254	6,059	1%	1%	1%	1%
Waianae	13,376	14,363	14,906	16,136	4%	4%	4%	4%	9,098	9,364	9,671	9,382	2%	1%	1%	1%
OAHU TOTAL	**336,899**	**364,900**	**379,200**	**414,600**	**100%**	**100%**	**100%**	**100%**	**600,214**	**649,200**	**670,500**	**727,800**	**100%**	**100%**	**100%**	**100%**
Annual Growth Rate		0.5%	0.4%	0.9%						0.5%	0.3%	0.8%				

NOTE: All projected "Oahu Total" counts are rounded to the nearest 100. Percentage shares by DP area may not sum to 100% due to rounding.

Areas with negative increases should be interpreted as stable communities with little or no growth expected. The negative population is caused by declines in household size that negated any population increases from housing unit gains.

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CHAPTER II: HOUSING SUPPLY AND DEMAND

This chapter examines land use from the perspective of housing, which takes up more than 75 percent of the lands zoned for urban uses on Oahu. Both the supply and demand aspects of housing are discussed. Demand analysis seeks to determine the number of housing units required to house the projected population described in Chapter I. The resultant long-range housing projection to the year 2040 is described. Supply analysis is concerned with determining how this projected need can be met. This report takes a bottom-up approach to supply by focusing on the projects and units being built or likely to be built based on current market knowledge, as opposed to a top-down approach that calculates the theoretical potential supply based on the characteristics of the land and the rules and constraints of the applicable regulations. The resultant housing production data details the location, characteristics and timeline of all housing units identified to date. Because of its special importance, affordable housing data is separately presented. This chapter concludes with an assessment of how the projected demand compares with the foreseeable supply, and what this comparison says about the housing policies in the underlying land use plans.

It is important to first point out that in this report supply and demand are net quantities. That is, the demand for housing in a particular year represents only the new demand that arise because of the new population in that year. Demand attributable to the relocation of the existing population is not reflected. In other words, this report is not concerned with gross market activities and fluctuations. Similarly, the housing supply in a particular year represents the new units constructed after accounting for the units demolished or relocated. In other words, the units tabulated for the projects in this report are not necessarily the total number of units associated with the projects.

Another point that requires clarification is that the term "housing unit" refers only to units intended for use by local residents, as opposed to visitors. This definition was observed in the historical data. For example, housing units in apartment (or condominium) buildings that operate as hotels are treated by the Census as commercial units, and so are excluded from the housing count. This definition was also used in the identification of known housing projects, so that condominiums in areas that allow short-term rentals (STRs) are not counted as housing units. However, STRs that are not permitted and do not have Nonconforming Use Certificates (NUCs) are counted as housing units. It is possible, however, that known projects identified as housing units will in fact be used as second homes or be subsequently placed in a hotel pool, thereby rendering the housing units unavailable to the resident population. The DBEDT report entitled *"Residential Home Sales in Hawaii: Trends and Characteristics"*[2] revealed that during the period from 2008 to 2015, 11.6 percent of the home sales on Oahu were purchased by mainlanders and that 3.6 percent were purchased by foreigners. Thus, up to 15 percent of the housing units identified may not be available since units purchased by non-residents are more likely to be used as second homes or as STRs. To the extent that a portion of these

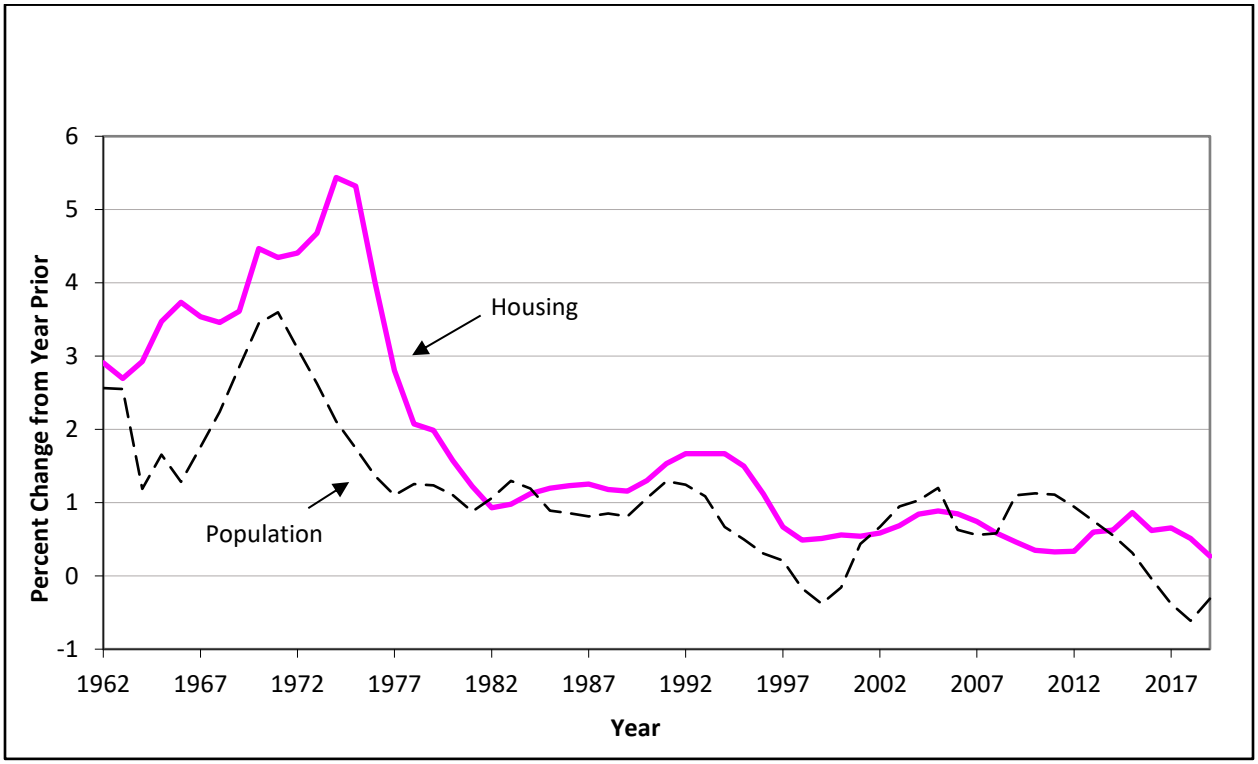
[2] *Residential Home Sales in Hawaii, Trends and Characteristics: 2008-2015*, DBEDT, May 2016, (http://files.hawaii.gov/dbedt/economic/data_reports/homesale/Residential_Home_Sales_in_Hawaii_May2016.pdf)

non-resident-owned units will in fact be available as rentals, the findings and conclusions of this report pertaining to the housing supply will need to be adjusted accordingly.

A. HISTORICAL EXPERIENCE

Historical data, from 1960 to the present, shows a direct relationship between housing and population growth. **FIGURE II-1** shows that the rate of growth of housing varies in a way that is very similar to the rate of growth of population. There are two observations of note. First, housing growth (based on number of units built) follows population growth by about two years. This is expected because it takes time for the building industry to recognize and respond to the need of the new population.

FIGURE II-1: HOUSING FOLLOWS POPULATION BY TWO YEARS



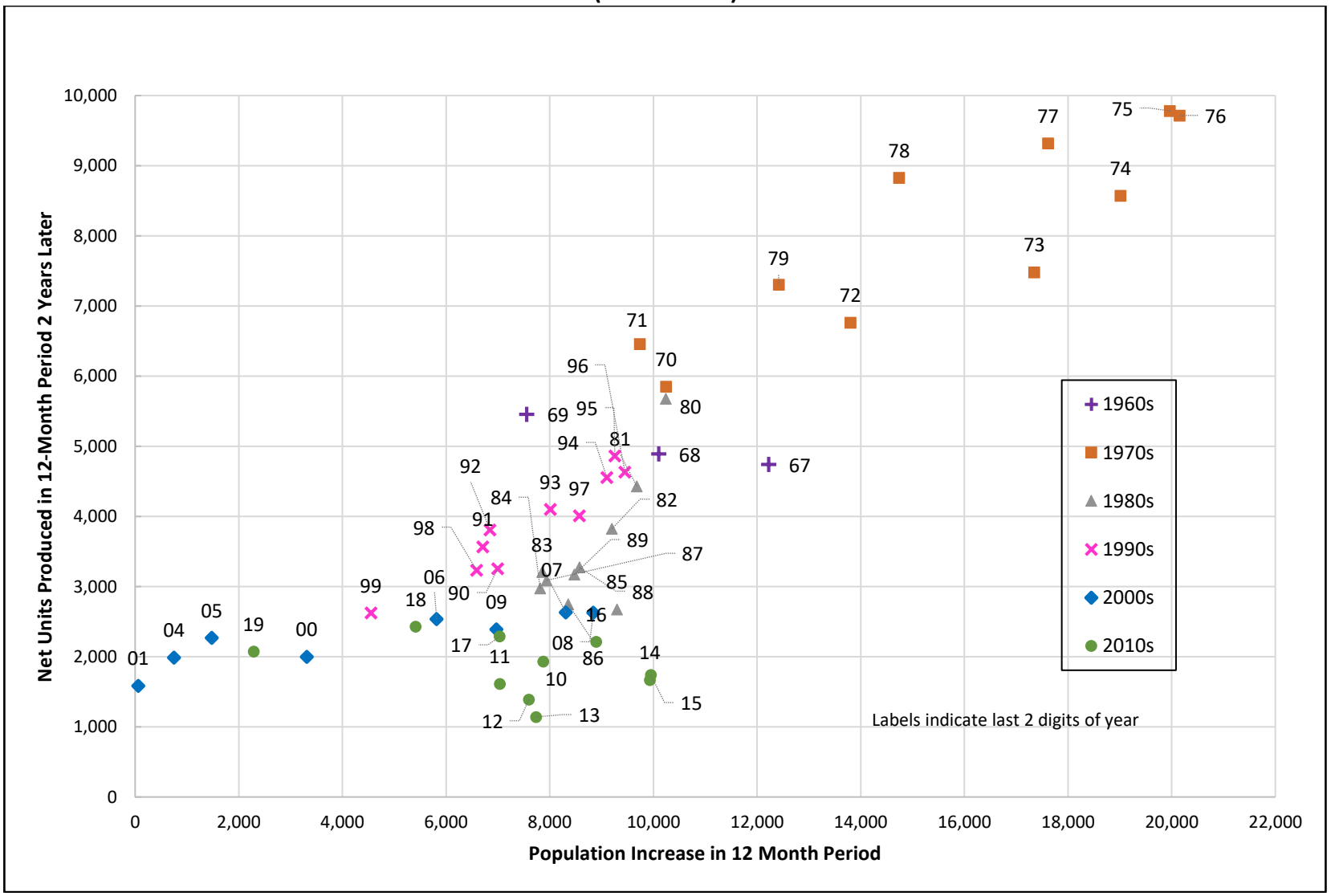
Second, housing growth rates tend to exceed population growth rates in a normal housing market. This is a reflection of the overall trend toward smaller household size. In a prolonged period of market difficulties, however, housing growth rates may trail population growth rates. This was in fact the case following the financial meltdown of 2007. In the long-run, however, these fluctuations are expected to even out, maintaining the relationship observed.

This relationship is better depicted by plotting the change in population against the resultant change in housing on a year-over-year basis. The result is shown in **FIGURE II-2**, where each data point represents the experience of a single year. The plot shows how housing production responds to changes in population over the course of more than five decades. Of interest is the rate of change between housing and population, as indicated by the slope implied by the data points. Two observations are noteworthy. First, data points belonging to a particular time

period tend to cluster near each other. Second, different time periods exhibit slightly different slopes. This difference can be attributed to the economic conditions of the time. For example, in the 60s and 70s, population increased in excess of 10,000 people per year, due in large measure to the euphoria of Statehood and the arrival of the jumbo jet. Housing increased correspondingly, as indicated by the positive slope of the trend line through the points representing the 70s. In the 80s and 90s, annual population growth fell to the 7,000-10,000 range, due in part to the airline strike in 1985, the Gulf War, and Hurricane Iniki. In response to the population reduction, housing production also declined, but not as rapidly as population, resulting in a slope that is steeper than that of the 70s. The post-2000 decade is characterized by slow population growth and economic malaise, punctuated by the financial meltdown that began in 2007. The housing response was essentially flat, with a nominally positive slope. The Great Recession that ensued in 2007, created a distressed market where housing production declined while population increased, resulting in a housing response rate that was negative.

While it is instructive to note the variations in the way housing responds to population, it is also important to point out that the data across the entire timeframe of more than 50 years also cast a trend line that is relatively linear. Regression analysis reveals a relationship that is statistically significant, tying the population increase over a 12-month period to the net housing units produced (construction less demolition) in the 12-month period two years later. The relationship can be described as consisting of a constant gain of 650 units and an additional 42 units for every 100 people added to the population base. This can be interpreted as the building industry anticipating a population increase of about 1,500 people a year, proceeding with building the units needed, then adjusting their plans to build more units as more population becomes evident. It should be pointed out that developers do not count population directly, but instead rely on price increases to gauge the degree of population growth.

FIGURE II-2: HOUSING PRODUCTION AND POPULATION GROWTH
(1967 – 2019)



B. DEMAND PROJECTION

Long-range planning on Oahu begins with the total population projected by the State DBEDT for each county. In order to plan for the housing needs of the projected population, it is necessary to develop a long-range housing projection.

The relationships gleaned from the historical data provided the quantitative basis for translating population into housing units. To avoid having to assume a specific market environment for the future, the statistical relationship based on the entire historical experience was used rather than any specific period as the basis for the projection.

The result is shown in **FIGURE II-3**, where the historical increases per year are shown together with the projected increases to the year 2040. Note that since Oahu's population over the next 30 years is not expected to exceed 5,000 people per year, this means the average housing increase is about 2,700 units per year. **TABLE II-1** summarizes the increase in housing units every 5 years from 2010 to 2040. The total housing stock for the year 2040 is estimated to be 414,600 units, for a population of 1,086,700. This represents a net increase of 77,700 new units between 2010 and 2040.

FIGURE II-3: HISTORICAL AND PROJECTED HOUSING UNIT INCREASE PER YEAR

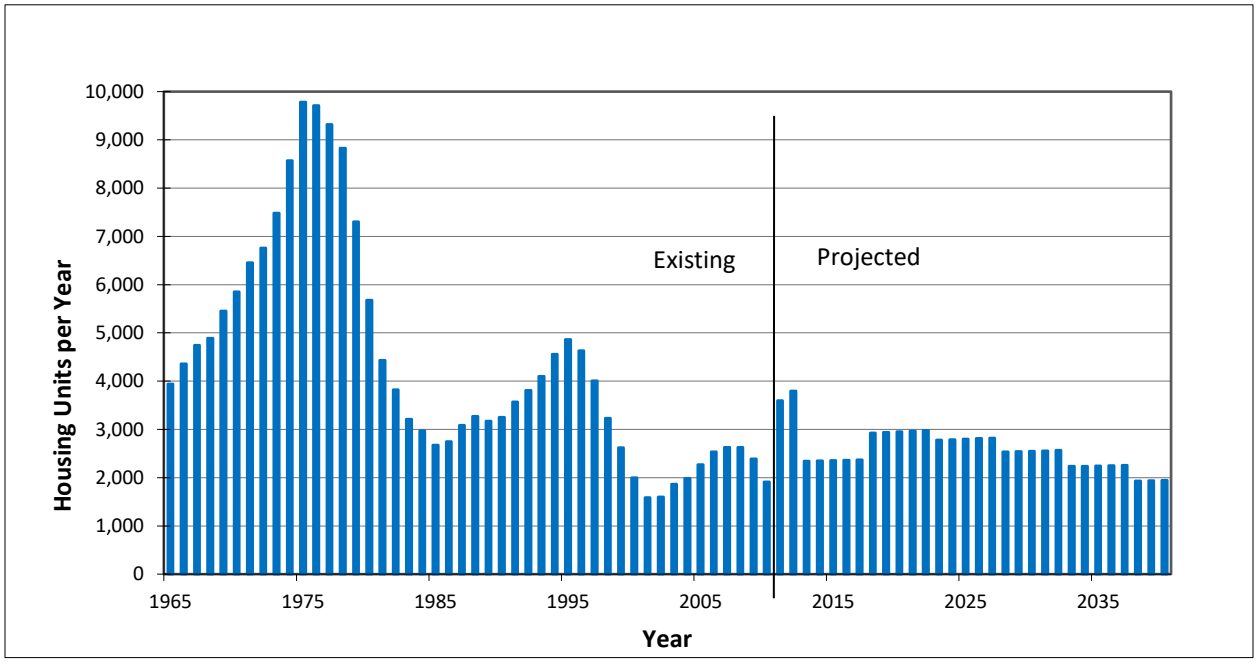


TABLE II-1: UNITS NEEDED TO HOUSE PROJECTED POPULATION (2010 – 2040)

YEAR	POPULATION	HOUSING UNITS	NET NEW UNITS
2010	955,800	336,900	0
2015	976,200	351,300	14,400
2020	1,003,700	364,900	28,000
2025	1,029,400	379,200	42,300
2030	1,052,100	392,500	55,600
2035	1,071,200	404,300	67,400
2040	1,086,700	414,600	77,700

This population-driven estimate of future housing demand can be interpreted as the historical-norm projection. This is because the projection will provide the level of housing that historically has satisfied the "shelter" need of the population. It assumes that the housing market will respond to the changing population the same way it did in the past, with the same characteristics and efficiencies (or inefficiencies), and under the same regulatory limitations and constraints. In other words, the future population under the historical norm projection would be no worse off housing-wise than the current or past population. They would be better off if more housing were provided by the market and worse off if less were provided.

It should also be noted that this projection is intended to estimate housing projection in the long-run. It is not intended to measure the year-to-year fluctuations of the housing market.

C. SUPPLY PROJECTION

Of equal importance to the projection of future housing needs is the examination of current conditions and actual development events. Thus, a detailed description of the housing units currently being produced is provided in this report. The inventory of housing units is created based on known projects. Previous reports have used a factor of 12 percent to account for projects that are unknown, in order to generate a "total market" production. It was determined that with increased information available for projects by small developers, this factor was no longer necessary. Known projects have become increasingly sufficient in capturing the total market.

1. Known Projects

To develop a reasonable inventory of these housing units, this report identified all projects known to the DPP that have a credible planning basis. This includes: housing units approved by the State Land Use Commission; units implied by the development policies of the City's General Plan; units in projects referenced in the City's eight DPs; units approved by the Hawaii Community Development Authority for Kakaako and Kalaeloa; units under the jurisdiction of the Department of Hawaiian Home Lands; and units on lands with entitlement under the City's zoning code and subdivision regulations. In other words, all housing projects that are consistent with the vision, policies, plans and regulations of the City and State are included.

Known projects are identified from several sources. First, projects are known to the DPP by virtue of its planning and permitting function. Examples include projects for which applications

have been submitted for Conservation District Use Permits, zoning changes, discretionary permit approvals, land subdivision, and building permits. Projects are also known by way of information gleaned from official communication with developers and land owners, such as affordable housing agreements. Unofficial communications, as well as data gathered from trade and professional journals, and announcements in the public media are also consulted. Finally, the DPP conducts an annual survey of major developers in order to track their current plans and construction schedules.

These known projects are then vetted as to their likelihood of completion based on their planning and entitlement status. They are classified into two groups: committed and proposed. Projects that are under construction, or have a building permit or have the proper zoning in place are referred to as "committed". Developments which are exempt from county planning and zoning rules, such as projects on Hawaiian Homes lands, are also treated as "committed". Projects without zoning but are supported by adopted plans, such as the DPs or approved by agencies such as the Hawaii Community Development Authority, are referred to as proposed".

The complete set of known ongoing projects identified as of 2020 is shown in **TABLE B-1** in **APPENDIX B**. ***Projects completed prior to 2020 are not included in this table.*** A total of 124 known projects were identified, involving 86,078 units across Oahu. The project list includes all projects in areas with ongoing developments. All construction schedules are shown on a fiscal year basis (i.e., fiscal year ends in June, as opposed to December). Each project is described by the following attributes:

1. Project name and location;
2. Project likelihood (committed vs. proposed);
3. Total housing units from project inception (after 1981);
4. Start year and estimated completion year;
5. Units completed in 2020; and
6. Estimated annual completion schedule from 2021 to 2024.

TABLE B-2 shows the number of affordable units in each of the ongoing known projects. In addition, the table shows the number of rental units in rental projects that charge affordable (140 percent of the area median income and below) versus market rent.

Unlike the tables in Appendix B, the following tables include all known projects, regardless of completion status. Project-specific data were aggregated by DPAs (regions) and its subareas (neighborhoods). Summary measures were then introduced to more clearly describe the data.

TABLE II-2 summarizes the status of known projects and their implied housing capacity. Of the 101,187 units associated with known projects, 38 percent have been built as of 2020, totaling 38,729 units. This leaves a capacity of 62,458 units remaining to be built on Oahu as of 2020. About half of this remaining capacity is in Ewa, totaling 29,199 units. The PUC and Central Oahu DPAs follow with 23,079 units and 8,394 units, respectively. Moreover, the remaining capacity of particular neighborhoods stands out within their region. They include: Kapolei East (which includes Hoopili) in Ewa with 12,340 units and Ala Moana/Kakaako in the PUC with 7,965 units.

Another way to describe these projects is to estimate the number of years required to exhaust the remaining capacity of the projects when completed, at the current production rate as observed. **TABLE II-3** shows that it will take about 33 years beyond 2020, (i.e., until the year 2053), to build out the remaining 62,458 units on Oahu. This reflects an estimated production rate of 1,904 units per year, which is based on the built experience from 2010 to 2020 and the expected production schedule of developers from 2021 to 2024. With respect to the planning regions, the PUC has 25 years remaining while Ewa has 38 years, based on their production rate of 914 and 760 units per year, respectively. Significantly lower production rates are expected for the remaining regions, with Central Oahu at 95 units per year, Waianae at 91 units per year, and the rest at less than 30 units per year. These lower production rates result in the large years-remaining figures shown for these regions.

It should be emphasized that the years-remaining figures described above are simply alternative expressions of the quantity of housing projects committed or proposed for the different areas. They reflect the areas' current development activities and market conditions. Because future production rates may increase or decrease, and because additional projects will come into play in the future, the years-remaining statements should not be interpreted as projections for the areas.

TABLE II-4 parses remaining capacity into "committed" and "proposed" to indicate the relative likelihood of project completion amongst the planning regions and neighborhoods. About 38 percent of the remaining capacity on Oahu consist of the more likely "committed" projects. The proportions for Ewa, Central Oahu, and East Honolulu are even greater, ranging from 43 percent to 75 percent "committed." The likelihood of other regions are significantly lower, with Waianae at 25 percent, Koolau Poko at 8 percent, and Koolau Loa and the North Shore almost absent of committed projects. The distribution of committed and proposed projects over time is shown in **FIGURE II-4**. As can be seen, committed projects generally occur in the near-term, while proposed projects occur in the more distant future.

TABLE II-2: STATUS OF KNOWN PROJECTS AND PROJECT CAPACITY

DP AREA	TOTAL HOUSING UNIT CAPACITY	UNITS BUILT BY 2020	PERCENT OF CAPACITY COMPLETED	REMAINING HOUSING UNIT CAPACITY
OAHU TOTAL	**101,187**	**38,729**	**38%**	**62,458**
PRIMARY URBAN CENTER	**32,484**	**9,405**	**29%**	**23,079**
Kaimuki	16	0	0%	16
McCully/Moiliili	1,492	179	12%	1,313
Waikiki	1,222	576	47%	646
Makiki	253	253	100%	0
Ala Moana/Kakaako	14,717	6,752	46%	7,965
Nuuanu/Punchbowl	326	216	66%	110
Downtown	1,006	6	1%	1,000
Liliha/Kapalama	811	0	0%	811
Kalihi-Palama	5,384	160	3%	5,224
Moanalua	613	613	100%	0
Aliamanu	56	0	0%	56
Airport Area	153	153	100%	0
Aiea	4,978	0	0%	4,978
Waiau/Pacific Palisades	1,457	497	34%	960
EWA	**55,145**	**25,946**	**47%**	**29,199**
Ewa Villages/Honouliuli	1,540	1,255	81%	285
Ewa Gentry/West Loch	8,668	8,130	94%	538
Ewa Beach/Iroquois Point	4,850	3,976	82%	874
Kalaeloa/Campbell Industrial	6,680	130	2%	6,550
Ko Olina/Honokai Hale	4,450	1,164	26%	3,286
City Of Kapolei	2,610	1,847	71%	763
Kapolei Villages	4,056	4,056	100%	0
Kapolei East	14,280	1,940	14%	12,340
Makakilo/Makaiwa Hills/Kunia	8,011	3,448	43%	4,563
CENTRAL OAHU	**8,821**	**427**	**5%**	**8,394**
Village Park/Kunia	1,887	37	2%	1,850
Waipahu	1,422	40	3%	1,382
Waipio	3,500	0	0%	3,500
Waiawa	1,500	0	0%	1,500
Mililani	96	48	50%	48
Mililani Mauka/Launani	373	298	80%	75
Wahiawa/Whitmore	43	4	9%	39
EAST HONOLULU	**1,138**	**1,081**	**95%**	**57**
Hawaii Kai	473	447	95%	26
Kuliouou-Kalani Iki	665	634	95%	31
KOOLAU POKO	**654**	**332**	**51%**	**322**
Kahaluu	44	0	0%	44
Kaneohe	46	41	89%	5
Kailua	255	213	84%	42
Waimanalo	309	78	25%	231
KOOLAU LOA	**400**	**0**	**0%**	**400**
Laie	400	0	0%	400
NORTH SHORE	**205**	**18**	**9%**	**187**
Haleiwa	181	0	0%	181
Sunset Beach/Pupukea	24	18	75%	6
WAIANAE	**2,340**	**1,520**	**65%**	**820**
Nanakuli	255	113	44%	142
Maili	1,274	958	75%	316
Waianae	425	351	83%	74
Makaha/Kaena	386	98	25%	288

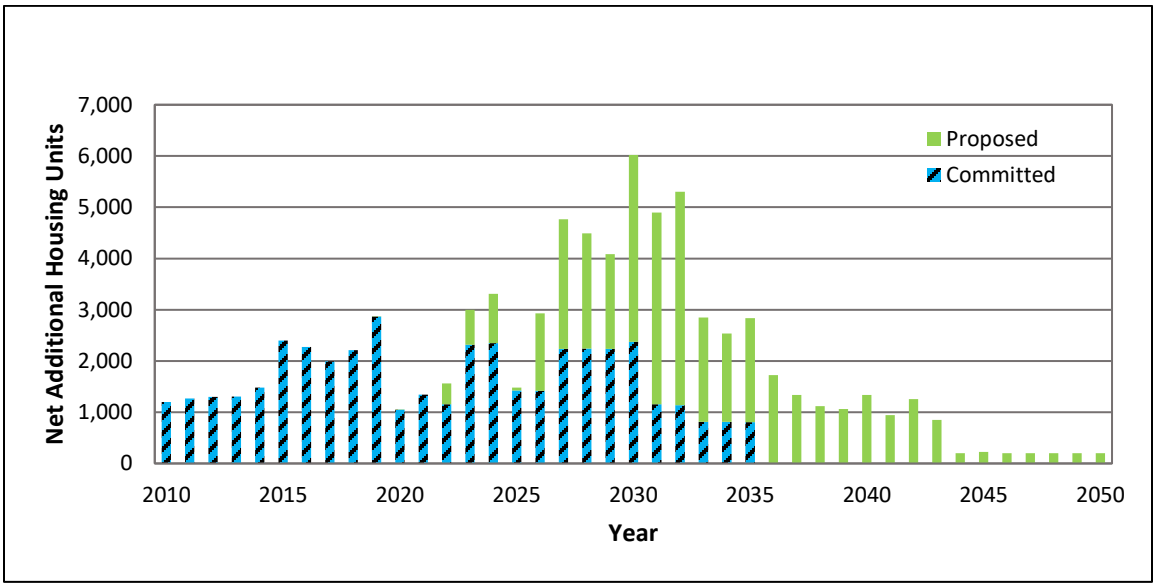
TABLE II-3: YEARS OF CAPACITY REMAINING IN KNOWN PROJECTS BEYOND 2020

DP AREA	REMAINING HOUSING UNIT CAPACITY	UNITS BUILT (2010-2020)	UNITS (2021-2024)	UNITS (2010-2024)	UNITS PER YEAR	YEARS REMAINING
OAHU TOTAL	**62,458**	**19,351**	**9,215**	**28,566**	**1,904**	**33**
PRIMARY URBAN CENTER	**23,079**	**9,299**	**4,407**	**13,706**	**914**	**25**
Kaimuki	16	0	0	0	0	0
McCully/Moiliili	1,313	179	317	496	33	40
Waikiki	646	470	434	904	60	11
Makiki	0	253	0	253	17	0
Ala Moana/Kakaako	7,965	6,752	2,718	9,470	631	13
Nuuanu/Punchbowl	110	216	0	216	14	8
Downtown	1,000	6	777	783	52	19
Liliha/Kapalama	811	0	0	0	0	0
Kalihi-Palama	5,224	160	21	181	12	433
Moanalua	0	613	0	613	41	0
Aliamanu	56	0	0	0	0	0
Airport Area	0	153	0	153	10	0
Aiea	4,978	0	140	140	9	533
Waiau/Pacific Palisades	960	497	0	497	33	29
EWA	**29,199**	**8,090**	**3,306**	**11,396**	**760**	**38**
Ewa Villages/Honouliuli	285	458	142	600	40	7
Ewa Gentry/West Loch	538	1,363	357	1,720	115	5
Ewa Beach/Iroquois Point	874	1,421	150	1,571	105	8
Kalaeloa/Campbell Industrial	6,550	50	0	50	3	1,965
Ko Olina/Honokai Hale	3,286	0	0	0	0	0
City Of Kapolei	763	1,827	143	1,970	131	6
Kapolei Villages	0	593	0	593	40	0
Kapolei East	12,340	1,927	2,501	4,428	295	42
Makakilo/Makaiwa Hills/Kunia	4,563	451	13	464	31	148
CENTRAL OAHU	**8,394**	**427**	**997**	**1,424**	**95**	**88**
Village Park/Kunia	1,850	37	0	37	2	750
Waipahu	1,382	40	0	40	3	518
Waipio	3,500	0	900	900	60	58
Waiawa	1,500	0	0	0	0	0
Mililani	48	48	0	48	3	15
Mililani Mauka/Launani	75	298	75	373	25	3
Wahiawa/Whitmore	39	4	22	26	2	23
EAST HONOLULU	**57**	**303**	**6**	**309**	**21**	**3**
Hawaii Kai	26	277	1	278	19	1
Kuliouou-Kalani Iki	31	26	5	31	2	15
KOOLAU POKO	**322**	**324**	**32**	**356**	**24**	**14**
Kahaluu	44	0	0	0	0	0
Kaneohe	5	33	5	38	3	2
Kailua	42	213	0	213	14	3
Waimanalo	231	78	27	105	7	33
KOOLAU LOA	**400**	**0**	**0**	**0**	**0**	**0**
Laie	400	0	0	0	0	0
NORTH SHORE	**187**	**10**	**1**	**11**	**1**	**255**
Haleiwa	181	0	0	0	0	0
Sunset Beach/Pupukea	6	10	1	11	1	8
WAIANAE	**820**	**898**	**466**	**1,364**	**91**	**9**
Nanakuli	142	73	0	73	5	29
Maili	316	418	302	720	48	7
Waianae	74	309	66	375	25	3
Makaha/Kaena	288	98	98	196	13	22

TABLE II-4: REMAINING CAPACITY OF KNOWN PROJECTS BEYOND 2020

DP AREA	REMAINING HOUSING UNIT CAPACITY	PERCENT OF OAHU TOTAL UNITS	UNITS COMMITTED	UNITS PROPOSED	PERCENT OF CAPACITY COMMITTED
OAHU TOTAL	**62,458**	**100%**	**23,821**	**38,637**	**38%**
PRIMARY URBAN CENTER	**23,079**	**37%**	**2,768**	**20,311**	**12%**
Kaimuki	16	0%	0	16	0%
McCully/Moiliili	1,313	2%	40	1,273	3%
Waikiki	646	1%	33	613	5%
Makiki	0	0%	0	0	0%
Ala Moana/Kakaako	7,965	13%	2,390	5,575	30%
Nuuanu/Punchbowl	110	0%	0	110	0%
Downtown	1,000	2%	284	716	28%
Liliha/Kapalama	811	1%	0	811	0%
Kalihi-Palama	5,224	8%	21	5,203	0%
Moanalua	0	0%	0	0	0%
Aliamanu	56	0%	0	56	0%
Airport Area	0	0%	0	0	0%
Aiea	4,978	8%	0	4,978	0%
Waiau/Pacific Palisades	960	2%	0	960	0%
EWA	**29,199**	**47%**	**17,156**	**12,043**	**59%**
Ewa Villages/Honouliuli	285	0%	143	142	50%
Ewa Gentry/West Loch	538	1%	357	181	66%
Ewa Beach/Iroquois Point	874	1%	874	0	100%
Kalaeloa/Campbell Industrial	6,550	10%	0	6,550	0%
Ko Olina/Honokai Hale	3,286	5%	3,286	0	100%
City Of Kapolei	763	1%	143	620	19%
Kapolei Villages	0	0%	0	0	0%
Kapolei East	12,340	20%	12,340	0	100%
Makakilo/Makaiwa Hills/Kunia	4,563	7%	13	4,550	0%
CENTRAL OAHU	**8,394**	**13%**	**3,614**	**4,780**	**43%**
Village Park/Kunia	1,850	3%	0	1,850	0%
Waipahu	1,382	2%	0	1,382	0%
Waipio	3,500	6%	3,500	0	100%
Waiawa	1,500	2%	0	1,500	0%
Mililani	48	0%	0	48	0%
Mililani Mauka/Launani	75	0%	75	0	100%
Wahiawa/Whitmore	39	0%	39	0	100%
EAST HONOLULU	**57**	**0%**	**43**	**14**	**75%**
Hawaii Kai	26	0%	12	14	46%
Kuliouou-Kalani Iki	31	0%	31	0	100%
KOOLAU POKO	**322**	**1%**	**26**	**296**	**8%**
Kahaluu	44	0%	0	44	0%
Kaneohe	5	0%	5	0	100%
Kailua	42	0%	0	42	0%
Waimanalo	231	0%	21	210	9%
KOOLAU LOA	**400**	**1%**	**0**	**400**	**0%**
Laie	400	1%	0	400	0%
NORTH SHORE	**187**	**0%**	**6**	**181**	**3%**
Haleiwa	181	0%	0	181	0%
Sunset Beach/Pupukea	6	0%	6	0	100%
WAIANAE	**820**	**1%**	**208**	**612**	**25%**
Nanakuli	142	0%	0	142	0%
Maili	316	1%	52	264	16%
Waianae	74	0%	58	16	78%
Makaha/Kaena	288	0%	98	190	34%

FIGURE II-4: COMMITTED VS. PROPOSED PROJECTS



2. Affordable Housing

Affordable housing has long been the stated goal of public policy in Honolulu. The GP adopted in 1977 specifically called for housing that people can afford. Late 1977 saw the first Unilateral Agreements (UA) by developers involving housing, when Waipio Gentry agreed to provide 10 percent of its housing units as affordable (i.e., at 80 percent of the median income). Act 15 increased the affordability requirement to 60 percent and became the impetus of residential development in Ewa Villages and Villages at Kapolei in the late 1980s. Hawaii Revised Statutes Chapter 359G and its successor Chapter 201H further promoted affordability, as public and quasi-public projects developed under these statutes are, by definition, affordable. Hawaiian Home Lands developments, which are exempt from county planning and zoning regulations, are also basically affordable. These affordable requirements were made under varying definitions of qualifying income, ranging from 30 percent to 140 percent of the median income of the households in the area under consideration. Under Resolution 09-241, the City Council, following the State's lead, revised the income limit for affordable housing required by UA from 120 percent to 140 percent of the area median income. In April 2018, the City Council passed Ordinance 18-10, codified as Revised Ordinances of Honolulu, Chapter 38, lowering the income limits for affordable units. The new limits for rental and for-sale housing units are 80 percent and 120 percent of the area median income, respectively.

This report monitors the state of affordable housing by providing data on: 1) the progress in building affordable and rental units and 2) the improvement (or lack thereof) in the housing cost burden borne by the affected households.

It should be pointed out that, in this report, affordable housing refers only to units intended by law or by design to be affordable, such as those defined by developers under the terms of a UA. They do not include existing units and future units offered with affordable rent set by the market without government assistance. Similarly, the rental units tabulated refer only to units

in projects built specifically for rent. They do not include rental units placed in the market by individual owners.

TABLE II-5 shows that the 101,187 units in the known project list contain a total of 40,658 affordable units (for sale or for rent), of which 19,413 are affordable rental units. Affordable units thus represent about 40 percent of the known projects. This is consistent with the cumulative effect of the various affordability requirements that have been in use over the past four decades. Rental units, in contrast, represent only 25 percent of the known project units. This confirms the fact that there have been few rental developments, particularly market rentals, in Honolulu. Rental developments have been increasing in recent years, however.

As of 2020, 16,652 of the 40,658 affordable units (41 percent) have been completed. Ewa accounted for about 62 percent of the completed total, or 10,926 units. In contrast, the PUC contributed to less than 30 percent of the total affordable units built.

During the years 2010 through 2020, 19,351 units were completed, of which 8,392 were affordable. This represents a 43 percent completion rate, which is 2 percent more than the cumulative completion rate. Ewa accounted for 38 percent of the affordable units built, but the PUC now contributed 47 percent of the total affordable units built over the 11-year period. Affordable housing units are likely to increase in the future as rail and transit-oriented development take hold.

TABLE II-5: KNOWN AFFORDABLE AND/OR RENTAL PROJECTS

DP AREA	TOTAL UNITS	INTENDED AS RENTALS	PERCENT INTENDED RENTALS	INTENDED AS AFFORD.	AFFORD. FOR SALE	AFFORD. FOR RENT	PERCENT INTENDED AFFORD.	AFFORD. BUILT BY 2020	PERCENT AFFORD. BUILT BY 2020	UNITS BUILT (2010-2020)	AFFORD. BUILT (2010-2020)	PERCENT AFFORD. BUILT (2010-2020)
OAHU TOTAL	**101,187**	**25,320**	**25%**	**40,658**	**21,245**	**19,413**	**40%**	**16,652**	**41%**	**19,351**	**8,392**	**43%**
PRIMARY URBAN CENTER	**32,484**	**16,670**	**51%**	**17,704**	**4,539**	**13,165**	**55%**	**4,474**	**25%**	**9,299**	**4,368**	**47%**
Kaimuki	16	0	0%	0	0	0	0%	0	0%	0	0	0%
McCully/Moiliili	1,492	1,312	88%	1,019	108	911	68%	54	5%	179	54	30%
Waikiki	1,222	808	66%	239	0	239	20%	168	70%	470	62	13%
Makiki	253	42	17%	132	90	42	52%	132	100%	253	132	52%
Ala Moana/Kakaako	14,717	3,136	21%	5,677	3,140	2,537	39%	2,979	52%	6,752	2,979	44%
Nuuanu/Punchbowl	326	192	59%	0	0	0	0%	0	0%	216	0	0%
Downtown	1,006	1,006	100%	765	0	765	76%	6	1%	6	6	100%
Liliha/Kapalama	811	800	99%	811	11	800	100%	0	0%	0	0	0%
Kalihi-Palama	5,384	5,185	96%	4,225	0	4,225	78%	160	4%	160	160	100%
Moanalua	613	613	100%	491	0	491	80%	491	100%	613	491	80%
Aliamanu	56	0	0%	42	42	0	75%	0	0%	0	0	0%
Airport Area	153	153	100%	153	0	153	100%	153	100%	153	153	100%
Aiea	4,978	1,966	39%	2,859	1,148	1,711	57%	0	0%	0	0	0%
Waiau/Pacific Palisades	1,457	1,457	100%	1,291	0	1,291	89%	331	26%	497	331	67%
EWA	**55,145**	**5,736**	**10%**	**17,521**	**14,033**	**3,488**	**32%**	**10,926**	**62%**	**8,090**	**3,066**	**38%**
Ewa Villages/Honouliuli	1,540	342	22%	1,344	1,152	192	87%	1,201	89%	458	404	88%
Ewa Gentry/West Loch	8,668	293	3%	2,950	2,657	293	34%	2,657	90%	1,363	0	0%
Ewa Beach/Iroquois Point	4,850	0	0%	787	787	0	16%	787	100%	1,421	0	0%
Kalaeloa/Campbell Industrial	6,680	365	5%	930	750	180	14%	130	14%	50	50	100%
Ko Olina/Honokai Hale	4,450	392	9%	392	0	392	9%	392	100%	0	0	0%
City Of Kapolei	2,610	1,416	54%	1,017	270	747	39%	724	71%	1,827	724	40%
Kapolei Villages	4,056	295	7%	3,372	3,221	151	83%	3,372	100%	593	593	100%
Kapolei East	14,280	2,128	15%	5,064	3,736	1,328	35%	1,308	26%	1,927	1,295	67%
Makakilo/Makaiwa Hills/Kunia	8,011	505	6%	1,665	1,460	205	21%	355	21%	451	0	0%
CENTRAL OAHU	**8,821**	**2,135**	**24%**	**3,706**	**1,683**	**2,023**	**42%**	**263**	**7%**	**427**	**263**	**62%**
Village Park/Kunia	1,887	37	2%	570	533	37	30%	37	6%	37	37	100%
Waipahu	1,422	1,350	95%	1,310	0	1,310	92%	0	0%	40	0	0%
Waipio	3,500	375	11%	1,075	700	375	31%	0	0%	0	0	0%
Waiawa	1,500	0	0%	450	450	0	30%	0	0%	0	0	0%
Mililani	96	0	0%	0	0	0	0%	0	0%	48	0	0%
Mililani Mauka/Launani	373	373	100%	301	0	301	81%	226	75%	298	226	76%
Wahiawa/Whitmore	43	0	0%	0	0	0	0%	0	0%	4	0	0%
EAST HONOLULU	**1,138**	**56**	**5%**	**56**	**0**	**56**	**5%**	**56**	**100%**	**303**	**56**	**18%**
Hawaii Kai	473	56	12%	56	0	56	12%	56	100%	277	56	20%
Kuliouou-Kalani Iki	665	0	0%	0	0	0	0%	0	0%	26	0	0%

TABLE II-5, CONTINUED

DP AREA	TOTAL UNITS	INTENDED AS RENTALS	PERCENT INTENDED RENTALS	INTENDED AS AFFORD.	AFFORD. FOR SALE	AFFORD. FOR RENT	PERCENT INTENDED AFFORD.	AFFORD. BUILT BY 2020	PERCENT AFFORD. BUILT BY 2020	UNITS BUILT (2010-2020)	AFFORD. BUILT (2010-2020)	PERCENT AFFORD. BUILT (2010-2020)
KOOLAU POKO	**654**	**53**	**8%**	**283**	**272**	**11**	**43%**	**76**	**27%**	**324**	**76**	**23%**
Kahaluu	44	0	0%	0	0	0	0%	0	0%	0	0	0%
Kaneohe	46	0	0%	0	0	0	0%	0	0%	33	0	0%
Kailua	255	42	16%	0	0	0	0%	0	0%	213	0	0%
Waimanalo	309	11	4%	283	272	11	92%	76	27%	78	76	97%
KOOLAU LOA	**400**	**0**	**0%**	**100**	**100**	**0**	**25%**	**0**	**0%**	**0**	**0**	**0%**
Laie	400	0	0%	100	100	0	25%	0	0%	0	0	0%
NORTH SHORE	**205**	**156**	**76%**	**168**	**12**	**156**	**82%**	**0**	**0%**	**10**	**0**	**0%**
Haleiwa	181	156	86%	168	12	156	93%	0	0%	0	0	0%
Sunset Beach/Pupukea	24	0	0%	0	0	0	0%	0	0%	10	0	0%
WAIANAE	**2,340**	**514**	**22%**	**1,120**	**606**	**514**	**48%**	**857**	**77%**	**898**	**563**	**63%**
Nanakuli	255	88	35%	141	53	88	55%	100	71%	73	60	82%
Maili	1,274	52	4%	527	475	52	41%	461	87%	418	207	50%
Waianae	425	284	67%	362	78	284	85%	296	82%	309	296	96%
Makaha/Kaena	386	90	23%	90	0	90	23%	0	0%	98	0	0%

a. Housing Cost Burden

One measure of housing affordability is the housing cost burden borne by households. Housing cost refers to all cost items associated with owning or renting a housing unit, including: mortgage payment or rent, property tax, utility cost, maintenance fees, etc. The housing cost burden of a household is defined as the ratio of housing cost to household income.

Housing cost burdens are classified into three levels of income. They are defined based on the income of the household relative to the median income of all households in Honolulu, as follows:

1. Low (less than or equal to 80 percent of median)
2. Moderate (greater than 80 percent and up to 120 percent of median)
3. Upper (greater than 120 percent of median)

It should be noted that if a household does not have a mortgage or pay rent, then its housing cost is not comparable to that of households that do pay mortgage or rent. Thus, in computing the cost burden of households, those with no mortgage or rent were first excluded. The result is shown in **TABLE II-6,** using data from the Public Use Microdata Sample files collected by the ACS conducted annually by the Census Bureau. The average cost burden of households estimated for each income level, and their respective margins of error, are shown over two time periods. The first period is the five years leading up to 2010 and serves as the baseline. The second period is the latest five years available, from 2015 to 2019. Together, they describe the cost burdens experienced by households in recent years as compared to those a decade earlier.

TABLE II-6: AVERAGE COST BURDEN OF HOUSEHOLDS BY INCOME LEVEL

INCOME LEVEL (% of Oahu Median Income)	2006-2010		2015-2019	
	AVERAGE COST BURDEN	MARGIN OF ERROR	AVERAGE COST BURDEN	MARGIN OF ERROR
Low (80% or below)	49%	±0.95%	50%	±0.77%
Moderate (greater than 80% to 120%)	34%	±0.73%	33%	±0.59%
Upper (greater than 120%)	24%	±0.34%	22%	±0.27%

The object of affordable housing, whether for sale or for rent, is to lower the cost of housing to an "affordable" level. This quantity varies geographically and differs by program, but is generally considered to be a third of household income. That is, housing is considered affordable if household pays a third, or 33 percent, of its income for housing. Using this standard, it can be seen that upper income households fared best, paying less than a quarter of their income for housing. Their cost burden in fact improved over time, dropping two percentage points from 24 percent to 22 percent, which is statistically significant. Moderate income households also fared well, paying well within their margin of error, about 33 percent of their income for housing. This cost burden did not change significantly over time, declining

by one percentage point. Cost burden is most onerous for low income households, i.e., those with income at or below 80 percent of Honolulu's median. These households pay on average 50% of their income for housing, which is considered a severe cost burden. This cost burden also did not change significantly over time, increasing by one percentage point over the past decade.

This set of outcomes suggests that past efforts at affordable housing may have benefitted moderate and upper income households, but have not had measurable impact on low income households. Future efforts will need to focus on households making at most 80 percent of Honolulu's median income in order for their severe cost burden to be alleviated. This conclusion is also evident by examining the income composition of households. **TABLE II-7** shows the shift in income among households over the past decade, differentiating between households that have to pay mortgage or rent and those that do not.

TABLE II-7: HOUSEHOLDS BY INCOME LEVEL

INCOME LEVEL (% of Oahu Median Income)	2006-2010		2015-2019		NET CHANGE IN HOUSEHOLDS
	HOUSEHOLDS	PERCENTAGE	HOUSEHOLDS	PERCENTAGE	
Low (80% or below)	70,110	23%	84,455	27%	+14,345
Moderate (greater than 80% to 120%)	48,772	16%	46,919	15%	-1,853
Upper (greater than 120%)	118,883	39%	112,606	36%	-6,277
No Mortgage or Rent	67,063	22%	68,815	22%	+1,753

It can be seen that over the past decade, a constant 22 percent of the households on Oahu did not have to pay mortgage or rent. For households that did pay, the share of upper income households declined by 3 percentage points, which translates to a loss of almost 6,300 units. The share of moderate income households also declined, but only by one point, or about 1,800 units. Low income households, in contrast, expanded its share from 23 percent to 27 percent in the course of a decade, resulting in a gain of over 14,300 units.

The decrease in the number of moderate and upper (up to 140 percent median) income households may have made it easier for these households to rent or purchase affordable units being offered, resulting in a smaller average cost burden and a tighter margin of error. This is shown by the results in **TABLE II-6**. A large and increasing share, as in the case of low income households, will require mitigating action at a scale on par with the size of the underlying household increase. Otherwise, the impact on cost burden is likely to be nil.

D. ASSESSMENT

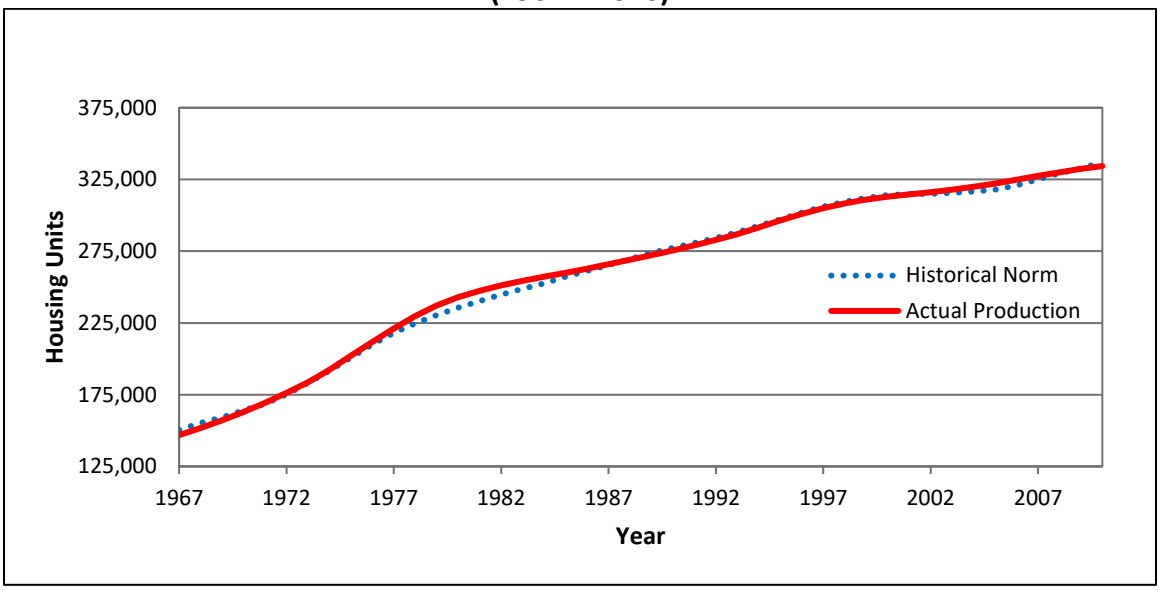
For a long term assessment, the projected demand is compared to the foreseeable supply. A recent survey of residents' preferences for new housing units is used to assess unmet demand as a near term assessment.

1. Long Term

One way to credibly assess the state of housing production on Oahu is to first establish the validity of the demand projections. The validation process has two requirements. First, the demand projections, when applied backward in time, must reasonably replicate the housing productions in the past. Second, the demand projections, in the short-term, must reasonably account for the market-based projects in the supply projections. For validation purposes, "short-term" is generally considered to be up to ten years in the future.

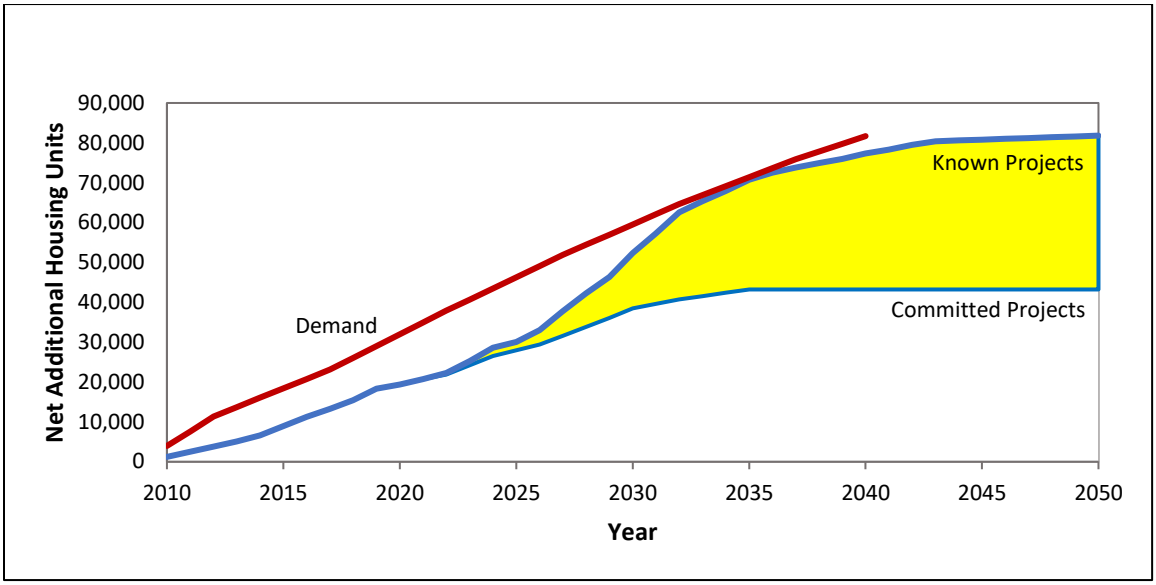
FIGURE II-5 compares the replicated historical productions with the actual housing production from 1967 to 2010. It can be seen that the "projected" productions adequately captured the actual conditions in the past five decades. Specifically, the "projections" differ from the actual housing production by an average deviation of about 1,100 units in any given year.

FIGURE II-5: ACTUAL HOUSING PRODUCTION VS. HISTORICAL NORM (1967 – 2010)



To assess how well the projected demand compares with the foreseeable supply, particularly in the short-term, the long-range housing demand projection is shown in **FIGURE II-6** together with the supply projections. Note that the demand projection ends at the official planning horizon of 2040, but the supply projections extend beyond to account for projects that cannot be completed by the planning horizon. The lines representing the known projects and committed projects form a band that depicts the range of variability in the certainty of these supply projections, with "committed projects" being the most certain. As expected, the band increases over time, reflecting the increasing uncertainty of the supply projections over time.

FIGURE II-6: DEMAND VS. SUPPLY PROJECTIONS



It can be seen that as a consequence of the Great Recession that followed the financial meltdown of 2007, housing production entered 2010 far short of the demand indicated by the historical-norm housing projection. The deficit is anticipated to reach a peak of about 15,630 units in 2022. The mean deviation of the demand projection is about 1,100 units.

In 2035, housing supply is anticipated to almost meet demand, and then fall short again in subsequent years. However, this is by no means an indication of market or supply deficiencies. Rather it is a reflection of the fact the supply projections are based only on currently known projects and on current knowledge about the known projects. As additional future projects emerge and as construction becomes more efficient, the supply and demand gap is expected to diminish over time.

Supply and demand is shown in greater detail in **TABLE II-8**. For each DPA on Oahu, demand over the period 2010-2040 is obtained from the housing projections described in Chapter I. The corresponding supply is derived from the DPA's known projects. The resultant comparison yields either a capacity excess or a deficit at the 2040 planning horizon. The capacity beyond 2040 is taken into account to give a measure of whether the totality of capacity would be adequate to meet the projected housing needs of the 2040 population.

TABLE II-8: KNOWN CAPACITY AS OF 2020 VS. PROJECTED HOUSING NEED

DP AREA	UNITS NEEDED TO HOUSE POPULATION (2010-2040)	NEED MET BY KNOWN CAPACITY (2010-2040)	EXCESS KNOWN CAPACITY (2010-2040)	KNOWN CAPACITY BEYOND 2040	TOTAL EXCESS KNOWN CAPACITY (2010-2050)
HONOLULU COUNTY TOTALS	**77,800**	**77,300**	**-500**	**4,500**	**4,000**
Primary Urban Center	29,500	32,000	2,500	400	2,900
Ewa	26,800	34,900	8,100	2,400	10,500
Central Oahu	12,700	7,700	-5,000	1,200	-3,900
East Honolulu	1,500	400	-1,100	0	-1,100
Koolau Poko	2,300	600	-1,700	0	-1,700
Koolau Loa	900	0	-900	400	-500
North Shore	1,300	200	-1,100	0	-1,100
Waianae	2,800	1,600	-1,200	100	-1,100

NOTE: Parts may not sum to totals because of rounding.

It should be pointed out that areas with capacity deficit are generally of greater interest than areas with excess capacity. This is because the former suggests that the market had underestimated the underlying demand for housing in the area and that effort would have to be made to increase the capacity. Areas with excess capacity, on the other hand, indicate only that current developers had overestimated the demand. Little or no effort would be needed to reduce the capacity since the excess consists mainly of proposed projects, and they can be dropped without much consequence or left in place to be developed in the more distant future.

TABLE II-8 shows that demand by 2040 exceeds island-wide supply by 500 units. If the 4,500-unit capacity available beyond 2040 is taken into account, the total excess market capacity is 4,000 units. This means that in order to meet the projected housing needs on Oahu as a whole in 2050, no new housing projects will need to be proposed beyond those already identified as of 2020.

There are, however, regional differences. Excess capacity may exist in two of the eight DPAs. It is dominated by Ewa, whose overall excess capacity of 10,500 units may consist of 8,100 units by 2040 and 2,400 units beyond 2040. The PUC may have may have excess capacity of 2,900 units by 2050. Central Oahu may have the biggest capacity deficit at 3,900 units, followed by Koolau Poko with a deficit of 1,700. East Honolulu, the North Shore, and Waianae all have capacity deficits of 1,100. This translates to an additional 35 units a year by 2050, which is not a significant quantity. Koolau Loa may have capacity deficit of 500 units. The magnitude of this deficit is within the margin of error of the estimates used in this report, and therefore can be regarded as negligible.

2. Short Term

Another way to assess the state of housing production on Oahu is to evaluate the extent to which the housing market is producing the kind of housing needed by Oahu residents. Because of data limitations, a short-term assessment, to the year 2027, was carried out. Three sets of characteristics were used to measure how well the housing market, as represented by the known projects, responds to the housing needs of Oahu residents.

These characteristics relate to:

1. Structure: Single-Family vs. Multi-Family,

2. Tenure: Owner vs. Renter; and

3. Affordability: 80 percent AMI (or below) vs. 80 percent-to-120 percent AMI vs. 120 percent-to-140 percent AMI.

TABLE II-9 summarizes the estimated current and future housing shortages in the short term. In terms of the above demand characteristics, the current housing shortage totals to 10,980 units, of which 5,220 units are for single-family dwellings and 5,340 units are for rentals. The shortage by 2027 is in primarily affordable units, as opposed to market-rate units. A shortage of 11,300 affordable housing units is anticipated, of which 7,010 (62 percent) are units for households earning 80 percent or below of the AMI.

TABLE II-9: HOUSING UNIT SHORTAGE

CHARACTERISTIC	HOUSING SHORTAGE	
	2020	By 2027
TOTAL	10,980	13,600
STRUCTURE TYPE		
Single Family	5,220	7,480
Multi-Family	5,760	6,130
TENURE		
Own	5,640	9,020
Rent	5,340	4,590
AFFORDABILITY		
80% AMI or below	7,760	7,010
80% - 120% AMI	1,710	4,290
Subtotal: Less than 120% AMI	9,470	11,300
120% - 140% AMI	670	2,220
Market-Rate (over 140% AMI)	840	90

The recent adoption of Ordinance 19-8 (Bill 7), which eased many building permit requirements for apartments, is anticipated to increase the supply of affordable rental housing. However, projects often experience delays, as they have during the past year, and as a result, shortages have increased, and are expected to continue to increase, over time. This means that if the DPP's housing demand projection holds, and the known projects identified in this report are fulfilled precisely in the manner assumed, then housing shortage will be higher by 2027. This conclusion should be viewed more as the logical consequence of the supply and demand assumptions made in this report. To the extent that these assumptions are wrong, the magnitude of the estimated shortage will be different. The reality is that a housing shortage is certain to exist in some form on Oahu because of structural reasons such as limited land, geographic isolation, global demand, and income inequality. These results and their derivation are detailed in the following sections.

a. Demand

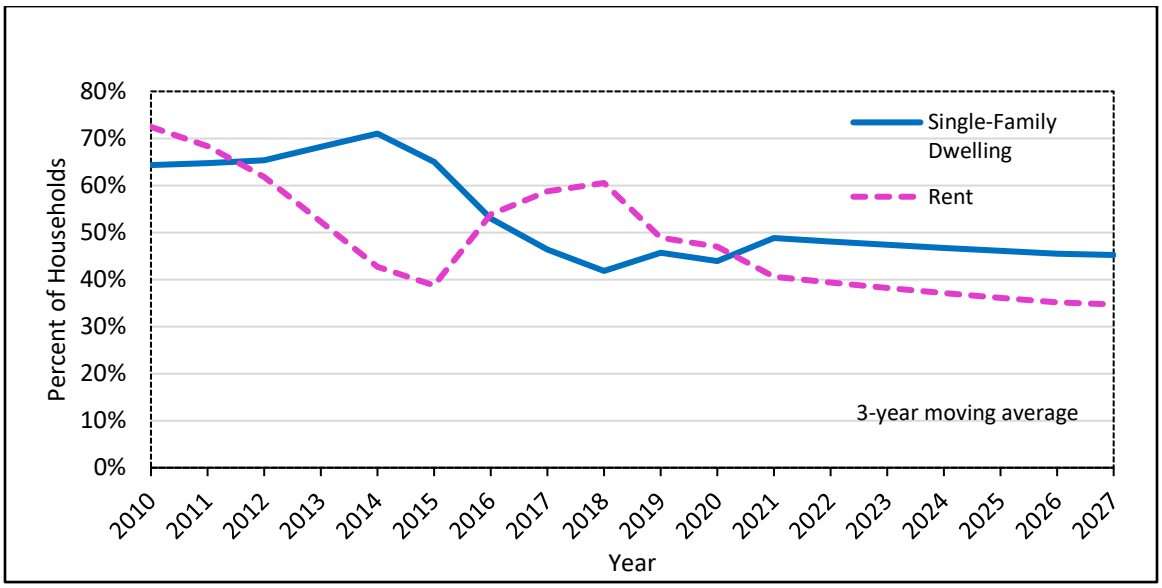
Housing demand in terms of the above characteristics was derived from unpublished, raw data developed by the *Hawaii Housing Planning Study (HHPS)*[3], a series of studies conducted by SMS Research and sponsored by the Hawaii Housing Finance and Development Corporation and other State and County agencies to assess the housing market in Hawaii. The HHPS conducted a series of Housing Demand Surveys from 2010 through 2019 to identify the structure, tenure, and affordability needs of residents. The surveys measured residents' opinions of their current housing conditions, their plans to move to new units, their new unit preferences, their financial qualifications for purchase or rent, and the demographic characteristics of household members. ***Note that this report reflects updated data from the 2019 HHPS study, whereas prior Annual Reports incorporated data from the 2016 study.***

The HHPS results are displayed in **FIGURE II-7** and **FIGURE II-8**. The graphs track the housing choices revealed through the HHPS demand surveys by households who plan to move within Oahu and are qualified to realize that choice during the period 2010 to 2027.

FIGURE II-7 shows the housing preferences with respect to structure and tenure choices. Note that only Single-Family (SF) is shown for structure choice; Multi-Family (MF) is not shown because it is simply the complement of SF. Similarly, only Rent is shown for tenure choice. It can be seen that over time, the preference for SF housing drops, from 65 percent in 2010 to 45 percent by 2027. (Alternatively, this means that the preference for MF housing is expected to rise to about 55 percent over the same period.) The preference for Renter housing is also seen to decline, but changes in the opposite direction until about 2021. That is, a rise in SF preference corresponds to a decline in Renter preference, and vice versa. This suggests that SF is associated with owning, and MF is associated with renting. This relationship is consistent with expectation and historical experience.

[3] *Hawaii Housing Planning Study, 2019*, https://dbedt.hawaii.gov/hhfdc/files/2020/01/FINAL-State_Hawaii-Housing-Planning-Study.pdf

FIGURE II-7: HOUSING PREFERENCE BY STRUCTURE AND TENURE

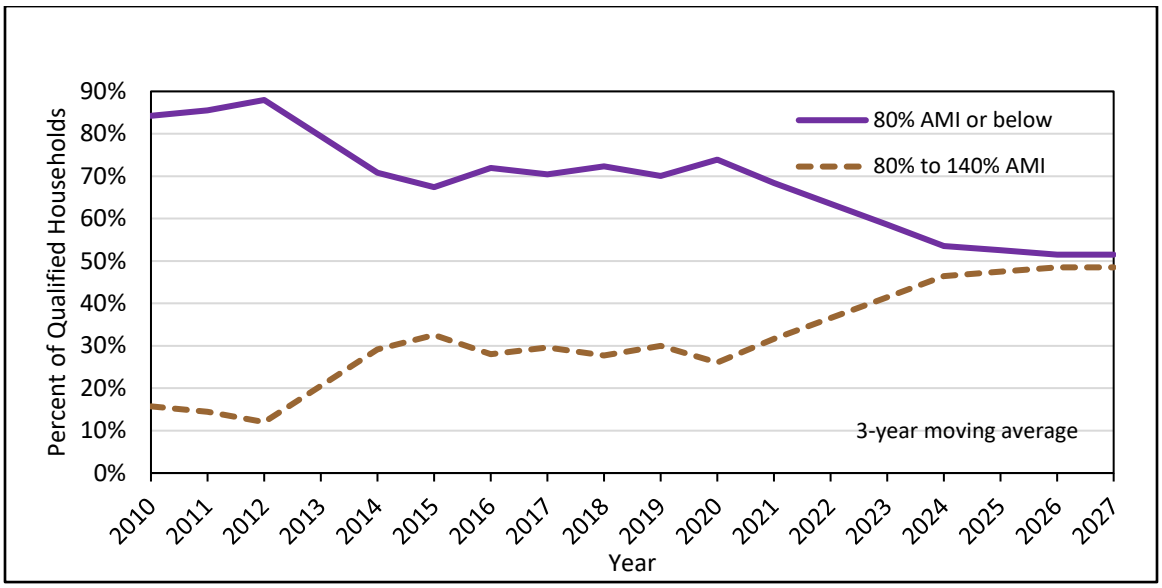


However, a new relationship emerges after 2021, where the preference for SF and renting may both start to slowly decline. By 2027, about 65 percent of households may prefer to own, and 55 percent prefer MF housing. This differs from the 2016 HHPS survey results, in which 70 percent preferred MF housing by 2027. Despite this decline, it still suggests that the traditional aspiration of owning a SF house may be changing to owning a condominium unit. This shift is likely due to the confluence of two factors. First, the high cost of SF dwellings makes SF ownership out of reach for many, forcing these households to the realization that owning MF housing may be the only realistic choice. Second, housing in a MF setting is becoming more available, acceptable, and desirable as evidenced by the advent of livable MF communities in areas like Kakaako.

FIGURE II-8 shows the demand for two types of affordable housing based on income. The HHPS defined affordable housing as housing that is affordable to households earning up to 140 percent of the AMI, adjusted for household size. Based on data from the demand survey on the current and expected income of the respondents, the study found that 86.9 percent of all households on Oahu qualified under this threshold. The income data further enabled the households that qualify for affordable housing to be divided into two groups: 1) households earning up to 80 percent of AMI, and 2) households earning more than 80 percent but less than 140 percent of AMI.

It can be seen that in 2010, close to 85 percent of the demand for affordable housing came from households with incomes of 80 percent AMI or below, as compared to 15 percent coming from households with incomes of 80 percent to 140 percent AMI. The HHPS data show that the demand for low-income housing is expected to drop to about 52 percent by 2027, while the demand for moderate-income housing is expected to rise to a little over 48 percent by 2027. This results in a situation where the demand from these two income groups almost equally split the pool of affordable housing.

FIGURE II-8: PERCENT AFFORDABLE HOUSING BY INCOME LEVEL



It must be emphasized that this result is based entirely on the respondents' expectation of their future income as obtained from the demand surveys. There is no underlying economic study or analysis. Specifically, the demand surveys revealed that low-income households expect their future income to rise, while moderate-income households expect theirs' to fall, though to different degree.

These demand preferences were applied to the housing projections described in Chapter II.B. to arrive at housing demand projections specific by structure, tenure, and affordability characteristics.

b. Supply

For purposes of this short-term assessment, housing supply is defined to consist only of known projects, as discussed in Chapter II.C.1. Information is generally provided by developers to enable the classification of projects in terms of their structure, tenure, and affordability characteristics and to specify the construction schedule of these projects. However, it must be recognized that project delays are frequently encountered during the planning, permitting and construction stage and schedules can easily change. Also, estimates are based on developers' plans and timelines *at the time they were surveyed*. Developers often alter their plans and schedules in response to real or perceived changes in the marketplace. Where the information from developers is not sufficient, statistical relationships inferred from historical data and professional judgment were used to attribute the necessary characteristics and timing. It is therefore important to recognize the inherent imprecision of the supply data, and to take this uncertainty into account when interpreting the result of this assessment.

c. Shortage

The known projects associated with a given set of characteristics in a given year were then compared against the corresponding set of demand for that year. Any excess or unmet demand from one year was carried over to the subsequent year, until the year 2027, which was the last year for which HHPS survey data was available. This process yielded a determination of whether the known projects in the short-term are producing sufficient housing units to meet demand in terms of the demand characteristics. **FIGURE II-9**, **FIGURE II-10** and **FIGURE II-11** display the results of comparing supply and demand by structure type, tenure and affordability, respectively. Note that the data shown in the graphs are 3-year moving averages (i.e., the average over three years). This served to smooth out the graphs and eliminate spikes, but it also made the references to the timeline less precise – something that should be taken into account when the discussion involves time.

FIGURE II-9 shows housing production shortages by type of structure. That is, it describes the adequacy of the known projects in terms of producing sufficient SF and MF dwellings to meet the underlying demand from 2010 to 2027. It can be seen that housing production falls short of demand for both SF and MF for the entire 18-year time period. There are, however, differences in how and when the shortages occur as described below in three stages.

The first stage from 2010 to 2014 depicts a housing market in recovery in the aftermath of the financial meltdown of 2007. SF and MF were respectively producing about 600 and 700 units per year, which is well below their historical rate. Demand meanwhile continued forward because of the need to house the growing population. Because the market could not fully accommodate the underlying demand, the unmet demand accumulated over time, resulting in the production shortages shown. Because households preferred SF over MF housing during this period, as shown in **FIGURE II-7**, SF shortage steadily outpaced that of MF. The gap reached a peak in 2014, when SF shortage exceeded MF shortage by more than 4,000 units.

Around 2018, the shortage of MF dwellings equals that of SF dwellings. In subsequent years, the shortage increases for both SF and MF dwellings. The result for 2027 is unclear because the data is not definitive. However, it should be noted that this short-term assessment is based on DBEDT's 2040 population projection series, where the 2020 population is only an estimate. Although data from the 2020 U.S. Census is not available as of this writing, it is expected to result in a population count for 2020 that is higher than the estimate. This will mean a higher housing demand for 2027, and in turn greater production shortages. Thus, it can be said that there will likely be a production shortage by 2027, and that shortage will likely be greater for MF than for SF, but that both shortages will likely be much lower than the shortages observed in the past.

FIGURE II-9: PRODUCTION SHORTAGE BY STRUCTURE TYPE

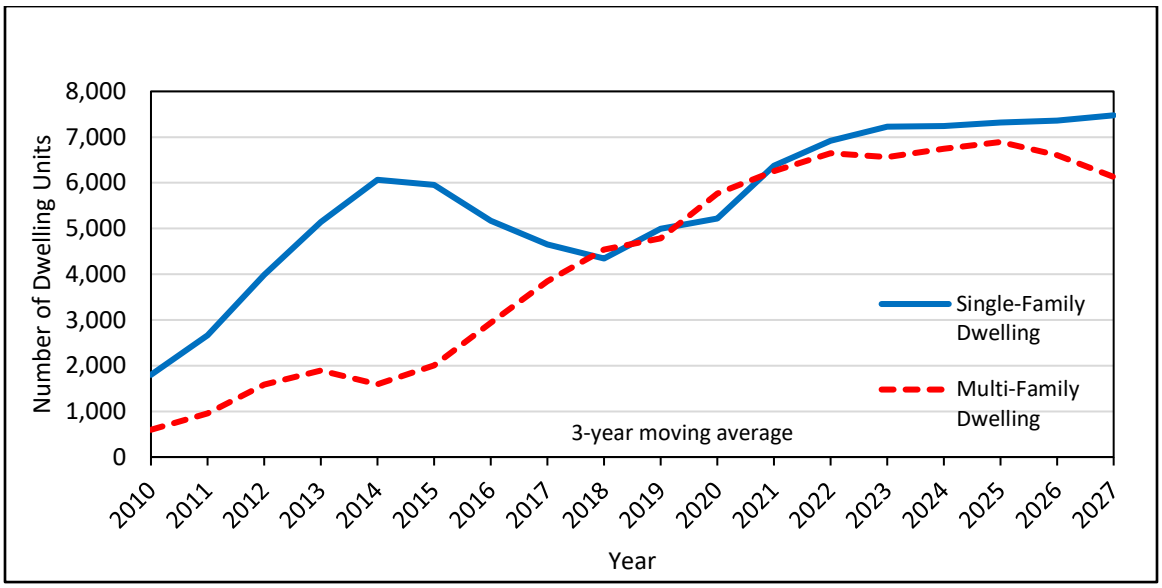


FIGURE II-10 shows production shortages by tenure. That is, it compares Owner units (defined as housing units built to be individually owned) with Renter units (defined as units in rental buildings) in term of their production adequacy. It should be pointed out that the timeline of Renter projects are not known with the same degree of specificity as structure types. Therefore, describing the timeline with great detail is neither helpful nor advisable. With this in mind, it can be said that up to about 2019, Renter units face a greater production shortage. For the next eight years, Owner units may face a greater shortage.

FIGURE II-10: PRODUCTION SHORTAGE BY TENURE

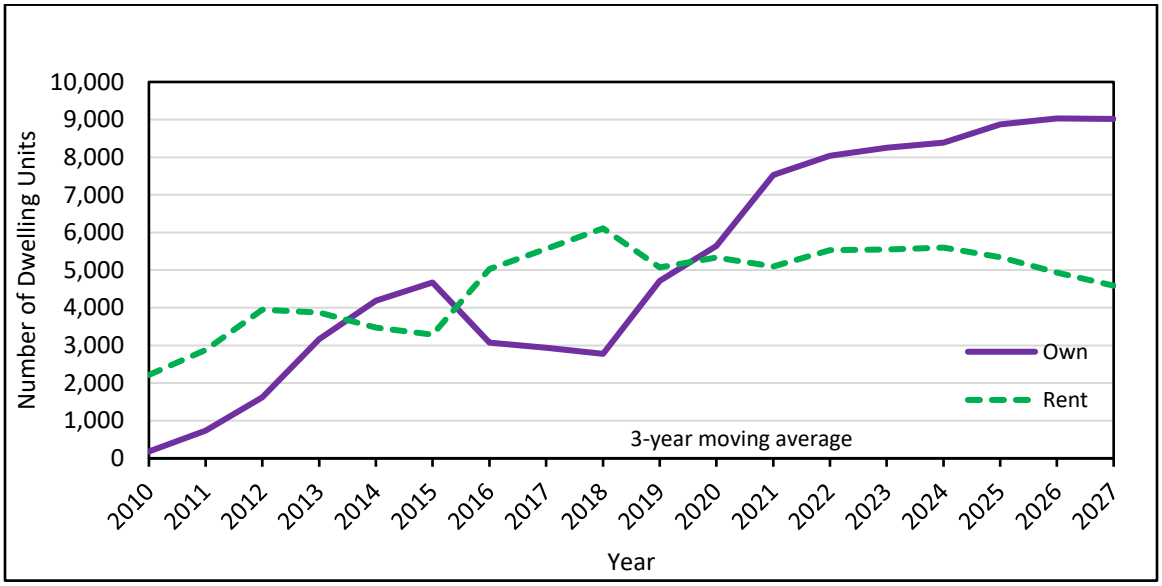
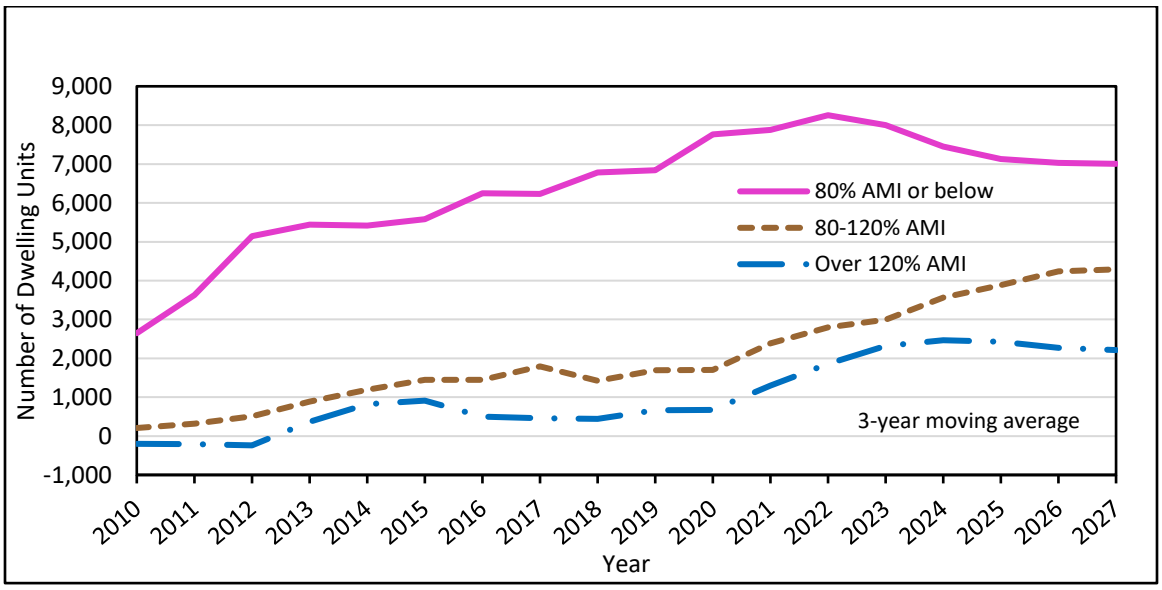


FIGURE II-11 shows the production shortages by affordability. Three types of affordable housing are described: 80 percent AMI or below, 80-120 percent AMI, and over 120 percent AMI. Like Renter housing, the timeline of affordable housing projects is not known with great specificity. In addition, the percent AMI definition of the affordable projects is often not known. Where this information is not available, assumptions are made. Therefore, only general statements can be made with regard to housing shortages by affordability. The data confirms the obvious fact that production shortages exist throughout the 18-year period for all types of affordable housing. Also as expected, the shortage is greater for those with incomes of 80 percent AMI or below compared to those with higher incomes. The housing shortage for low-income households continues to increase until it reaches a peak of about 8,300 units around 2022. Households with incomes between 80 percent and 120 percent AMI display a lower shortage. It began with a low shortage in 2010, reflecting in part the depressed housing market in recovery after the 2007 financial meltdown. The shortage may then increase steadily, until a shortage of about 4,300 units in 2027. Households with incomes higher than 120 percent AMI have the lowest housing shortage. There was a small surplus in 2010 through 2012, which reverted to a shortage of about 400 units by 2013. The shortage is expected to fluctuate somewhat through the years, while increasing, and ending with a shortage of about 2,200 units in 2027.

FIGURE II-11: PRODUCTION SHORTAGE BY AFFORDABILITY



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CHAPTER III: LAND USE PLANNING AND APPROVALS

A. DEVELOPMENT PLANS

The City's long-range land use planning tool consists of eight regional plans, called DPs or SCPs. Each plan provides a guide for all public and private decisions on physical development within the region, and describes: (1) the region's role within the islandwide growth policy; (2) the plan's vision for the area's future; (3) detailed regional or area-specific policy guidance on land use and infrastructure development; (4) tools to implement the plan; and (5) conceptual maps and other illustrations of the plan's policies.

These long-range plans serve as a guide to both the City's zoning controls and its infrastructure plans and expenditures. They provide a policy bridge between the State Land Use Districts and county land use regulations. There is also a separate Public Infrastructure Map (PIM) system that depicts specific types of future infrastructure projects. The PIM for each region shows the general location of certain major public infrastructure that affects regional development capacity and growth.

TABLE III-1 provides the current status of the development plans.

TABLE III-1: STATUS OF DEVELOPMENT PLANS

DEVELOPMENT PLAN / SUSTAINABLE COMMUNITIES PLAN	STATUS
Primary Urban Center	Adopted June 2004; revised plan underway
Ewa	Adopted July 2013; amended December 2020
Central Oahu	Adopted March 2021
East Honolulu	Adopted April 2021
Koolau Poko	Adopted August 2017
Koolau Loa	Adopted February 2021
North Shore	Adopted May 2011; revised plan underway
Waianae	Adopted March 2012

Changes to these plans on specific matters can be proposed at any time, but the main avenue for plan revisions is their required periodic review, which must begin five years after approval, and which includes a thorough analysis of: (1) the validity of each plan's vision and policies, and (2) the effectiveness of its implementation measures. Future revised development plans may transition to a ten-year periodic review.

B. STATE LAND USE DISTRICT BOUNDARY AMENDMENTS

TABLE III-2 provides information on a State Land Use district boundary amendment adopted in FY 2020.

TABLE III-2: STATE LAND USE DISTRICT BOUNDARY AMENDMENTS

PROJECT NAME	REDESIGNATION	ACRES	DATE OF APPROVAL	CONTROL NUMBER	SUMMARY OF REQUIRED CONDITIONS
There were no State Land Use district boundary amendments adopted during this period.					

C. ZONE CHANGES

TABLE III-3 provides data on zone changes approved in FY 2020.

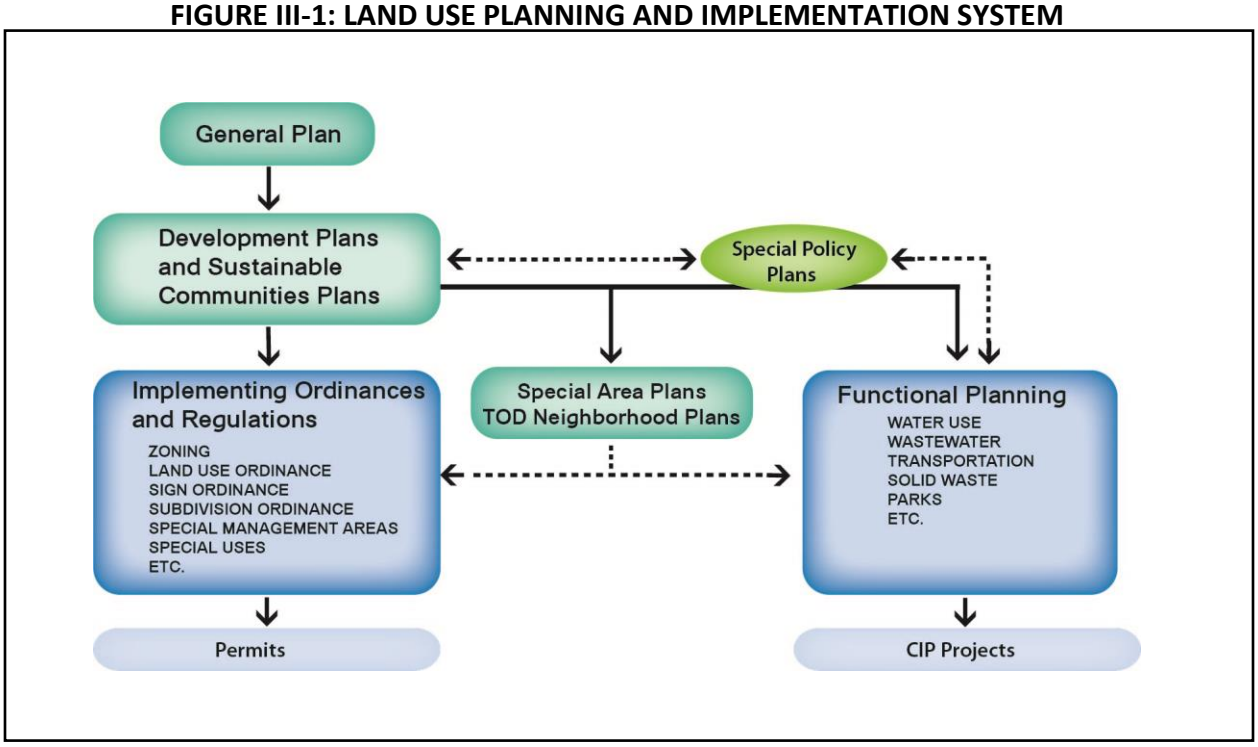
TABLE III-3: ZONE CHANGES APPROVED

ORD. NO.	ORD. DATE	DPP NUMBER	LOCATION OR PROJECT NAME	APPROVED ZONE CHANGES		CHANGED TO URBAN USE?
				FROM/TO	ACRES	
20-12	6/4/20	2019/Z-3	Haleiwa KEM 7309, LLC	from R-5 to B-1	0.302	

D. LAND USE AND INFRASTRUCTURE PLANNING

The relationship between the different parts of the City's land-use and infrastructure planning system is depicted in **FIGURE III-1**. This diagram shows the City's planning tiers. The GP is the first tier of planning for the City that sets forth the desired distribution pattern for Oahu's population and includes policy guidance that considers the physical, social, cultural, economic, and environmental concerns affecting Oahu. All subsequent DPs, Sustainable Communities Plans, Area Plans, and other Special Policy Plans and Functional Plans, must be consistent with the GP. Ordinances and Regulations are the policy and regulatory tools that implement the GP and the various levels of plans. In addition, capital projects must be aligned with the GP and often implement the City's more detailed levels of planning.

FIGURE III-1: LAND USE PLANNING AND IMPLEMENTATION SYSTEM



E. ORDINANCES

Recent noteworthy ordinances pertaining to land use planning and housing development are summarized in **TABLE III-4**.

TABLE III-4: NOTEWORTHY ORDINANCES

ORDINANCE	DESCRIPTION
20-6 Relating to Condominium Property Regimes	Amends the provisions of the Land Use Ordinance pertaining to condominiums and condominium property regimes.
20-11 Relating to Affordable Housing Incentives	Amends the affordable housing incentives enacted by Ordinance 18-1, as amended by Ordinance 19-8.
20-13 Relating to Affordable Rental Housing	Amends the regulations for rental housing in Ordinance 19-8.

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APPENDIX A: SUMMARIES OF SELECTED CHARACTERISTICS

FOR THE PERIOD 2015-2019

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TABLE A-1: POPULATION, HOUSING UNITS, HOUSEHOLDS, AND INCOME BY DP SUBAREA

DP SUBAREA	POPULATION		HOUSING UNITS		HOUSEHOLDS		AVERAGE HOUSEHOLD SIZE		MEDIAN HOUSEHOLD INCOME
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate ($)
HONOLULU COUNTY TOTALS	**984,821**	**0**	**350,571**	**317**	**312,795**	**1,538**	**3.03**	**0.02**	**85,857**
PRIMARY URBAN CENTER	**448,984**	**6,028**	**183,854**	**1,710**	**159,094**	**1,705**	**2.70**	**0.05**	**75,164**
Waialae-Kahala	6,752	577	3,041	192	2,686	192	2.51	0.28	108,343
Kaimuki	18,518	1,055	6,980	287	6,122	286	2.96	0.22	101,373
Diamond Head	18,860	1,095	8,727	347	7,387	339	2.53	0.19	81,118
Palolo	13,197	1,081	4,660	238	4,226	255	3.08	0.31	72,971
Manoa	24,241	1,235	7,671	309	6,955	307	2.81	0.20	100,098
McCully/Moiliili	27,199	1,483	14,290	504	12,526	519	2.12	0.15	54,011
Waikiki	17,901	954	19,324	526	10,531	507	1.68	0.12	59,702
Makiki	31,591	1,534	17,440	625	15,920	608	1.96	0.12	62,591
Ala Moana/Kakaako	23,045	1,468	14,998	630	11,952	604	1.92	0.16	62,887
Nuuanu/Punchbowl	17,217	1,393	6,913	388	6,028	388	2.81	0.29	93,228
Downtown	12,956	837	7,954	327	7,004	340	1.84	0.15	55,431
Liliha/Kapalama	23,494	1,466	6,929	313	6,487	311	3.40	0.28	87,557
Kalihi-Palama	42,378	2,180	11,655	404	10,959	411	3.62	0.24	54,392
Kalihi Valley	21,082	1,592	4,630	250	4,397	254	4.71	0.45	98,123
Moanalua	9,231	922	3,234	219	2,969	211	2.95	0.37	87,478
Aliamanu	39,136	1,820	12,886	433	12,057	441	3.20	0.19	84,575
Airport Area	23,764	1,224	6,722	314	6,320	326	3.23	0.24	75,000
Aiea	32,817	1,624	11,244	417	10,579	421	3.02	0.19	88,052
Waiau/Pacific Palisades	45,605	1,734	14,556	354	13,989	365	3.14	0.15	100,062
EWA	**121,520**	**3,739**	**35,471**	**684**	**33,156**	**697**	**3.63**	**0.14**	**104,620**
Ewa Villages/Honouliuli	6,585	1,073	1,723	206	1,697	205	3.87	0.79	75,150
Ewa Gentry/West Loch	33,616	1,749	9,769	299	9,351	317	3.59	0.22	110,400
Ewa Beach/Iroquois Point	19,492	1,709	4,872	261	4,377	265	4.40	0.47	97,628
Ocean Pointe	13,153	976	3,952	198	3,863	205	3.40	0.31	119,338
Kalaeloa/Campbell Industrial	2,491	440	792	55	678	89	2.58	0.54	54,772
Ko Olina/Honokai Hale	2,961	377	1,722	67	1,013	95	2.91	0.46	109,201
City Of Kapolei	2,980	403	1,022	120	1,022	120	2.83	0.51	125,152
Kapolei Villages	16,899	1,634	4,600	293	4,401	283	3.84	0.45	97,604
Kapolei East	3,541	892	930	177	884	178	3.96	1.29	84,120
Makakilo/Makaiwa	19,802	1,389	6,089	299	5,870	298	3.37	0.29	110,701

TABLE A-1, CONTINUED

DP SUBAREA	POPULATION		HOUSING UNITS		HOUSEHOLDS		AVERAGE HOUSEHOLD SIZE		MEDIAN HOUSEHOLD INCOME
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate ($)
CENTRAL OAHU	**171,206**	**4,103**	**51,160**	**826**	**48,719**	**852**	**3.37**	**0.10**	**86,898**
Village Park/Kunia	14,880	1,545	4,145	288	3,983	291	3.74	0.47	112,919
Waipahu	39,923	2,459	8,876	356	8,505	364	4.51	0.34	77,792
Waikele	7,442	935	2,882	263	2,765	270	2.69	0.43	104,054
Waipio	11,649	787	3,967	193	3,792	197	3.04	0.26	90,522
Waiawa	435	156	0	0	0	0	0.00	0.00	0
Mililani	33,013	1,423	10,916	322	10,576	328	3.12	0.17	95,876
Mililani Mauka/Launani	20,090	778	7,275	210	6,961	224	2.88	0.15	113,172
Wahiawa/Whitmore	21,944	1,620	7,323	388	6,840	395	3.14	0.30	65,004
Schofield/Wheeler	21,830	1,278	5,776	260	5,297	287	3.30	0.27	62,121
EAST HONOLULU	**47,540**	**1,307**	**18,534**	**230**	**16,560**	**392**	**2.86**	**0.10**	**133,165**
Hawaii Kai	29,066	1,337	11,430	369	10,254	393	2.83	0.17	126,030
Kuliouou-Kalani Iki	15,922	928	6,071	245	5,314	246	2.97	0.22	148,090
Waialae Nui/Country Club	2,552	182	1,033	21	992	44	2.50	0.21	128,493
KOOLAU POKO	**112,829**	**2,910**	**36,595**	**638**	**34,269**	**635**	**3.14**	**0.10**	**106,664**
Kahaluu	13,220	1,165	4,399	218	4,139	228	3.17	0.33	114,172
Kaneohe	38,409	1,653	12,835	366	12,103	370	3.11	0.16	111,012
Kailua	40,269	1,576	14,112	383	13,184	372	2.98	0.15	115,292
Waimanalo	9,642	1,068	2,435	192	2,226	181	4.31	0.59	92,977
Mokapu	11,289	868	2,814	204	2,617	207	2.97	0.34	59,878
KOOLAU LOA	**15,092**	**1,124**	**4,540**	**232**	**3,368**	**204**	**3.87**	**0.40**	**86,494**
Kahuku/Kawela	2,402	421	1,135	125	660	93	3.59	0.81	87,677
Laie	7,754	898	1,467	165	1,267	146	4.56	0.86	95,435
Hauula/Punaluu	3,804	489	1,440	91	1,030	93	3.63	0.58	76,973
Kaaawa	1,132	201	498	55	411	53	2.75	0.60	86,363
NORTH SHORE	**17,679**	**1,402**	**6,766**	**354**	**5,531**	**349**	**3.16**	**0.32**	**84,408**
Mokuleia	2,341	368	1,056	95	819	96	2.86	0.56	85,191
Waialua	3,175	453	1,125	132	1,009	130	3.14	0.60	83,201
Haleiwa	3,566	645	1,109	143	940	130	3.79	0.86	74,041
Kawailoa	4,008	597	1,540	152	1,258	155	3.05	0.59	70,517
Sunset Beach/Pupukea	4,589	924	1,936	236	1,505	234	3.05	0.78	103,382
WAIANAE	**49,971**	**2,758**	**13,651**	**478**	**12,098**	**482**	**3.97**	**0.27**	**69,139**
Nanakuli	11,900	951	2,931	160	2,778	164	4.28	0.43	71,470
Maili	12,197	1,872	2,922	327	2,827	315	4.00	0.79	86,154
Waianae	16,467	1,382	4,490	232	3,955	246	3.96	0.41	63,327
Makaha/Kaena	9,407	1,135	3,308	206	2,538	212	3.63	0.55	58,699

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.

SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-2: HOUSING UNITS, TENURE, AND VACANCY RATES BY DP SUBAREA

DP SUBAREA	OCCUPIED HOUSING UNITS								VACANT HOUSING UNITS					
	Occupied Units		Owner Occupied		Renter Occupied		Home Ownership Rate		Vacant Units		Vacancy Rate (Owner)		Vacancy Rate (Rentals)	
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
HONOLULU COUNTY TOTALS	**312,795**	**1,538**	**175,751**	**2,028**	**137,044**	**1,823**	**56%**	**1%**	**37,776**	**1,512**	**1%**	**0%**	**5%**	**1%**
PRIMARY URBAN CENTER	**159,094**	**1,705**	**74,906**	**1,260**	**84,188**	**1,608**	**47%**	**1%**	**24,760**	**1,170**	**2%**	**0%**	**7%**	**1%**
Waialae-Kahala	2,686	192	1,861	168	825	163	69%	8%	355	139	3%	3%	2%	3%
Kaimuki	6,122	286	4,125	265	1,997	241	67%	5%	858	210	0%	0%	6%	4%
Diamond Head	7,387	339	4,026	285	3,361	318	55%	5%	1,340	252	4%	3%	4%	3%
Palolo	4,226	255	2,254	206	1,972	242	53%	6%	434	143	2%	2%	7%	4%
Manoa	6,955	307	4,377	267	2,578	272	63%	5%	716	219	1%	1%	9%	5%
McCully/Moiliili	12,526	519	3,724	322	8,802	529	30%	3%	1,764	353	1%	1%	6%	2%
Waikiki	10,531	507	4,232	351	6,299	451	40%	4%	8,793	551	4%	3%	23%	4%
Makiki	15,920	608	6,806	451	9,114	595	43%	3%	1,520	368	3%	2%	6%	2%
Ala Moana/Kakaako	11,952	604	4,297	406	7,655	569	36%	4%	3,046	522	2%	2%	6%	3%
Nuuanu/Punchbowl	6,028	388	3,437	286	2,591	350	57%	6%	885	273	2%	3%	9%	6%
Downtown	7,004	340	2,301	218	4,703	333	33%	4%	950	212	0%	0%	8%	3%
Liliha/Kapalama	6,487	311	3,776	262	2,711	277	58%	5%	442	145	0%	0%	0%	0%
Kalihi-Palama	10,959	411	3,108	263	7,851	407	28%	3%	696	169	0%	0%	4%	1%
Kalihi Valley	4,397	254	2,668	212	1,729	221	61%	6%	233	90	1%	1%	1%	1%
Moanalua	2,969	211	1,466	153	1,503	171	49%	6%	265	123	2%	2%	3%	3%
Aliamanu	12,057	441	6,439	359	5,618	433	53%	4%	829	227	1%	1%	2%	2%
Airport Area	6,320	326	43	19	6,277	326	1%	0%	402	139	0%	0%	3%	2%
Aiea	10,579	421	6,180	338	4,399	419	58%	4%	665	203	1%	1%	2%	2%
Waiau/Pacific Palisades	13,989	365	9,786	346	4,203	292	70%	3%	567	182	0%	0%	5%	3%
EWA	**33,156**	**697**	**22,935**	**663**	**10,221**	**623**	**69%**	**2%**	**2,315**	**334**	**1%**	**1%**	**4%**	**1%**
Ewa Villages/Honouliuli	1,697	205	1,201	182	496	146	71%	14%	26	29	0%	0%	0%	0%
Ewa Gentry/West Loch	9,351	317	7,116	362	2,235	300	76%	5%	418	162	1%	1%	2%	3%
Ewa Beach/Iroquois Point	4,377	265	2,396	229	1,981	198	55%	6%	495	173	1%	2%	7%	4%
Ocean Pointe	3,863	205	3,054	215	809	208	79%	7%	89	59	0%	0%	3%	4%
Kalaeloa/Campbell Industrial Park	678	89	0	0	678	89	0%	0%	114	66	0%	0%	7%	5%
Ko Olina/Honokai Hale	1,013	95	610	84	403	85	60%	10%	709	91	3%	4%	10%	8%
City Of Kapolei	1,022	120	632	97	390	130	62%	12%	0	0	0%	0%	0%	0%
Kapolei Villages	4,401	283	3,056	257	1,345	269	69%	7%	199	150	2%	2%	3%	3%
Kapolei East	884	178	557	125	327	142	63%	19%	46	45	0%	0%	0%	0%
Makakilo/Makaiwa Hills/Kunia	5,870	298	4,313	281	1,557	263	73%	6%	219	119	1%	2%	3%	3%

TABLE A-2, CONTINUED

DP SUBAREA	OCCUPIED HOUSING UNITS								VACANT HOUSING UNITS					
	Occupied Units		Owner Occupied		Renter Occupied		Home Ownership Rate		Vacant Units		Vacancy Rate (Owner)		Vacancy Rate (Rentals)	
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
CENTRAL OAHU	**48,719**	**852**	**29,147**	**709**	**19,572**	**787**	**60%**	**2%**	**2,441**	**372**	**0%**	**0%**	**3%**	**1%**
Village Park/Kunia	3,983	291	3,097	270	886	192	78%	9%	162	102	0%	0%	9%	8%
Waipahu	8,505	364	4,406	282	4,099	343	52%	4%	371	141	0%	0%	3%	2%
Waikele	2,765	270	1,894	206	871	270	68%	10%	117	110	0%	0%	4%	7%
Waipio	3,792	197	2,750	184	1,042	192	73%	6%	175	111	0%	0%	8%	7%
Waiawa	0	0	0	0	0	0	0%	0%	0	0	0%	0%	0%	0%
Mililani	10,576	328	8,064	332	2,512	276	76%	4%	340	141	1%	1%	4%	3%
Mililani Mauka/Launani	6,961	224	5,513	244	1,448	232	79%	4%	314	145	0%	0%	2%	2%
Wahiawa/Whitmore	6,840	395	3,382	322	3,458	374	49%	6%	483	162	0%	0%	3%	2%
Schofield/Wheeler	5,297	287	41	31	5,256	291	1%	1%	479	127	0%	0%	1%	0%
EAST HONOLULU	**16,560**	**392**	**13,749**	**387**	**2,811**	**351**	**83%**	**3%**	**1,974**	**366**	**1%**	**1%**	**5%**	**4%**
Hawaii Kai	10,254	393	8,213	353	2,041	302	80%	5%	1,176	292	1%	1%	6%	5%
Kuliouou-Kalani Iki	5,314	246	4,726	242	588	144	89%	6%	757	190	1%	1%	5%	8%
Waialae Nui/Country Club	992	44	810	75	182	82	82%	8%	41	43	0%	0%	0%	0%
KOOLAU POKO	**34,269**	**635**	**23,501**	**584**	**10,768**	**527**	**69%**	**2%**	**2,326**	**346**	**1%**	**0%**	**3%**	**1%**
Kahaluu	4,139	228	3,258	226	881	174	79%	7%	260	123	2%	2%	0%	0%
Kaneohe	12,103	370	8,930	359	3,173	301	74%	4%	732	203	1%	1%	4%	3%
Kailua	13,184	372	9,613	364	3,571	314	73%	3%	928	206	0%	0%	3%	2%
Waimanalo	2,226	181	1,679	167	547	127	75%	10%	209	98	0%	0%	0%	0%
Mokapu	2,617	207	21	21	2,596	207	1%	1%	197	107	0%	0%	1%	2%
KOOLAU LOA	**3,368**	**204**	**1,761**	**156**	**1,607**	**165**	**52%**	**6%**	**1,172**	**148**	**1%**	**1%**	**3%**	**2%**
Kahuku/Kawela	660	93	448	84	212	55	68%	16%	475	88	0%	1%	9%	8%
Laie	1,267	146	554	99	713	129	44%	9%	200	89	0%	0%	0%	0%
Hauula/Punaluu	1,030	93	488	75	542	79	47%	8%	410	74	2%	3%	6%	6%
Kaaawa	411	53	271	44	140	36	66%	14%	87	29	2%	3%	0%	0%
NORTH SHORE	**5,531**	**349**	**2,719**	**251**	**2,812**	**296**	**49%**	**5%**	**1,235**	**258**	**3%**	**3%**	**1%**	**1%**
Mokuleia	819	96	381	72	438	86	47%	10%	237	68	5%	5%	1%	1%
Waialua	1,009	130	635	99	374	99	63%	13%	116	64	0%	0%	1%	2%
Haleiwa	940	130	561	106	379	98	60%	14%	169	84	0%	0%	0%	0%
Kawailoa	1,258	155	268	69	990	146	21%	6%	282	109	9%	11%	1%	1%
Sunset Beach/Pupukea	1,505	234	874	179	631	198	58%	15%	431	197	4%	7%	0%	0%
WAIANAE	**12,098**	**482**	**7,033**	**398**	**5,065**	**435**	**58%**	**4%**	**1,553**	**248**	**0%**	**0%**	**3%**	**2%**
Nanakuli	2,778	164	1,875	132	903	141	67%	6%	153	73	0%	0%	0%	0%
Maili	2,827	315	1,793	280	1,034	278	63%	12%	95	109	0%	0%	0%	0%
Waianae	3,955	246	2,270	196	1,685	230	57%	6%	535	152	1%	0%	7%	5%
Makaha/Kaena	2,538	212	1,095	157	1,443	197	43%	7%	770	146	1%	1%	1%	1%

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.

SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-3: POPULATION BY AGE AND SEX BY DP SUBAREA

DP SUBAREA	AGE											SEX			
	MEDIAN AGE	Under Age 18		Age 18 to 19		Age 20 to 21		Age 22 to 64		Age 65 and Older		Male		Female	
		Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
HONOLULU COUNTY TOTALS	**37.9**	**209,223**	**1,450**	**21,638**	**60**	**27,966**	**1,059**	**555,625**	**2,576**	**170,369**	**2,145**	**496,066**	**50**	**488,755**	**50**
PRIMARY URBAN CENTER	**40**	**80,835**	**2,041**	**9,888**	**703**	**12,566**	**835**	**257,928**	**3,436**	**87,767**	**1,776**	**225,640**	**3,539**	**223,344**	**3,494**
Waialae-Kahala	53	1,086	183	64	39	57	43	3,354	326	2,191	251	3,415	348	3,337	321
Kaimuki	48	2,827	329	312	154	249	92	10,370	606	4,760	385	9,100	624	9,418	594
Diamond Head	44	2,585	343	269	102	504	163	11,569	695	3,933	354	9,216	658	9,644	642
Palolo	42	2,147	310	199	81	268	100	7,825	627	2,758	330	6,765	630	6,432	615
Manoa	38	3,542	368	1,926	326	1,697	287	12,034	700	5,042	395	11,763	729	12,478	780
McCully/Moiliili	41	3,948	491	473	160	1,026	313	17,254	951	4,498	428	13,529	891	13,670	901
Waikiki	44	1,644	298	274	152	264	125	12,018	759	3,701	355	9,355	642	8,546	569
Makiki	46	4,036	512	326	133	482	199	19,292	1,080	7,455	565	15,201	935	16,390	965
Ala Moana/Kakaako	44	3,170	570	276	124	246	107	14,448	927	4,905	535	11,223	890	11,822	866
Nuuanu/Punchbowl	43	3,312	459	292	139	373	163	9,513	744	3,727	375	8,624	787	8,593	768
Downtown	48	1,555	309	131	92	182	90	7,994	574	3,094	310	6,421	532	6,535	489
Liliha/Kapalama	44	4,270	466	339	113	522	167	12,834	733	5,529	407	11,302	826	12,192	830
Kalihi-Palama	38	8,156	613	1,404	263	1,472	256	24,211	1,038	7,135	523	21,671	1,226	20,707	1,264
Kalihi Valley	42	4,175	411	543	140	544	155	12,101	706	3,719	357	10,595	881	10,487	846
Moanalua	42	2,025	336	159	86	240	108	4,811	468	1,996	268	4,555	526	4,676	527
Aliamanu	36	9,342	708	519	144	770	173	22,125	978	6,380	506	19,606	1,003	19,530	1,053
Airport Area	25	8,116	566	657	180	1,223	252	13,623	693	145	60	13,445	810	10,319	633
Aiea	39	6,223	578	659	163	1,008	223	19,174	957	5,753	431	16,964	976	15,853	926
Waiau/Pacific Palisades	42	8,676	649	1,066	218	1,439	310	23,378	946	11,046	563	22,890	1,011	22,715	1,031
EWA	**34**	**33,400**	**1,421**	**2,193**	**330**	**2,533**	**361**	**70,123**	**1,872**	**13,271**	**753**	**60,220**	**2,082**	**61,300**	**2,106**
Ewa Villages/Honouliuli	39	1,690	373	158	87	127	84	3,150	432	1,460	314	3,150	612	3,435	556
Ewa Gentry/West Loch	35	8,559	697	553	149	531	151	20,403	1,036	3,570	403	16,710	935	16,906	1,069
Ewa Beach/Iroquois Point	34	5,344	519	198	76	495	152	11,000	708	2,455	296	9,708	959	9,784	904
Ocean Pointe	34	4,079	494	217	105	214	101	7,597	607	1,046	191	6,662	566	6,491	568
Kalaeloa/Campbell Industrial Park	32	497	134	33	30	72	39	1,691	334	198	111	1,514	335	977	191
Ko Olina/Honokai Hale	37	642	119	15	16	80	66	1,741	215	483	84	1,502	190	1,459	230
City Of Kapolei	30	889	217	13	27	16	33	1,858	292	204	102	1,442	255	1,538	256
Kapolei Villages	32	5,288	635	497	162	271	101	9,445	729	1,398	255	8,379	962	8,520	852
Kapolei East	29	1,239	321	61	92	84	113	1,808	326	349	129	1,501	379	2,040	553
Makakilo/Makaiwa Hills/Kunia	34	5,173	544	448	159	643	193	11,430	704	2,108	265	9,652	750	10,150	811

TABLE A-3, CONTINUED

DP SUBAREA	AGE											SEX			
		Under Age 18		Age 18 to 19		Age 20 to 21		Age 22 to 64		Age 65 and Older		Male		Female	
	MEDIAN AGE	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
CENTRAL OAHU	**35**	**39,425**	**1,432**	**3,588**	**409**	**5,780**	**559**	**96,404**	**2,050**	**26,009**	**1,044**	**88,080**	**2,388**	**83,126**	**2,208**
Village Park/Kunia	41	2,880	485	287	122	351	157	9,086	728	2,276	377	7,657	866	7,223	784
Waipahu	39	8,509	669	1,022	220	927	217	21,939	1,029	7,526	567	19,420	1,331	20,503	1,351
Waikele	36	1,502	320	121	97	106	90	4,731	555	982	228	3,790	546	3,652	478
Waipio	38	2,292	299	160	67	269	93	6,966	502	1,962	233	5,568	461	6,081	485
Waiawa	39	1	2	0	0	0	0	433	135	1	2	435	156	0	0
Mililani	41	6,824	549	484	145	895	198	18,158	797	6,652	434	16,919	858	16,094	777
Mililani Mauka/Launani	39	4,985	407	408	112	446	126	11,941	593	2,310	345	10,122	487	9,968	516
Wahiawa/Whitmore	37	5,230	578	427	163	567	175	11,534	756	4,186	457	11,436	974	10,508	838
Schofield/Wheeler	23	7,202	612	679	174	2,219	372	11,616	689	114	60	12,733	849	9,097	633
EAST HONOLULU	**48.4**	**9,293**	**591**	**800**	**162**	**746**	**176**	**24,609**	**917**	**12,092**	**632**	**23,577**	**836**	**23,963**	**736**
Hawaii Kai	47	6,076	546	514	137	436	136	14,943	776	7,097	496	14,427	783	14,639	757
Kuliouou-Kalani Iki	50	2,849	339	249	99	278	113	8,493	519	4,053	323	7,962	526	7,960	539
Waialae Nui/Country Club	56	368	92	37	30	32	30	1,173	178	942	155	1,188	141	1,364	142
KOOLAU POKO	**39**	**23,110**	**1,022**	**2,775**	**368**	**3,845**	**440**	**62,115**	**1,505**	**20,984**	**783**	**57,581**	**1,726**	**55,248**	**1,629**
Kahaluu	46	2,627	385	253	113	280	145	7,108	552	2,952	316	6,700	665	6,520	631
Kaneohe	44	7,265	582	613	151	502	123	21,798	893	8,231	495	18,960	923	19,449	939
Kailua	42	7,977	568	823	198	1,071	219	22,329	862	8,069	465	19,683	889	20,586	948
Waimanalo	38	2,345	312	317	120	353	142	4,895	394	1,732	228	4,777	601	4,865	597
Mokapu	22	2,896	371	769	216	1,639	298	5,985	514	0	0	7,461	730	3,828	347
KOOLAU LOA	**29**	**4,042**	**371**	**893**	**212**	**734**	**168**	**7,757**	**494**	**1,666**	**189**	**7,724**	**684**	**7,368**	**627**
Kahuku/Kawela	37	660	134	63	36	43	30	1,206	153	430	86	1,154	227	1,248	221
Laie	24	1,927	279	768	205	589	158	3,885	415	585	132	4,040	554	3,714	523
Hauula/Punaluu	34	1,159	192	46	32	84	44	2,010	202	505	96	1,967	316	1,837	239
Kaaawa	38	296	70	16	16	18	17	656	90	146	42	563	102	569	114
NORTH SHORE	**34**	**4,131**	**452**	**275**	**106**	**446**	**172**	**10,321**	**710**	**2,506**	**285**	**9,007**	**804**	**8,672**	**759**
Mokuleia	32	415	98	53	32	112	44	1,527	174	234	53	1,149	201	1,192	195
Waialua	39	745	150	67	42	19	18	1,706	208	638	117	1,602	243	1,573	251
Haleiwa	36	881	186	17	20	6	11	2,060	271	602	145	1,762	390	1,804	318
Kawailoa	26	1,127	255	138	90	233	156	2,168	357	342	93	2,006	328	2,002	361
Sunset Beach/Pupukea	35	963	269	0	0	76	54	2,860	480	690	187	2,488	536	2,101	493
WAIANAE	**33**	**14,987**	**982**	**1,226**	**241**	**1,316**	**260**	**26,368**	**1,107**	**6,074**	**479**	**24,237**	**1,516**	**25,734**	**1,556**
Nanakuli	31	3,449	341	396	117	381	89	6,336	420	1,338	173	5,624	521	6,276	562
Maili	33	3,784	670	295	147	320	192	6,400	725	1,398	322	6,134	1,002	6,063	1,077
Waianae	34	4,760	491	431	137	444	127	8,599	573	2,233	255	8,070	788	8,397	743
Makaha/Kaena	33	2,994	399	104	65	171	83	5,033	442	1,105	176	4,409	634	4,998	628

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.

SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-4: RACE BY DP SUBAREA

DP SUBAREA	TOTAL		THOSE WHO REPORTED ONE RACE													
			One Race		White		Black or African American		American Indian and Alaska Native		Asian Alone		Native Hawaiian and Other Pacific Islander		Some Other Race	
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
HONOLULU COUNTY TOTALS	**984,821**	**0**	**756,126**	**3,801**	**206,218**	**1,246**	**23,603**	**962**	**1,900**	**289**	**420,093**	**3,068**	**93,980**	**1,799**	**10,332**	**1,019**
PRIMARY URBAN CENTER	**448,984**	**6,028**	**361,603**	**5,467**	**82,224**	**2,421**	**10,698**	**1,154**	**653**	**181**	**229,139**	**4,574**	**33,691**	**2,447**	**5,198**	**692**
Waialae-Kahala	6,752	577	5,748	542	2,301	397	20	25	0	0	3,255	372	127	125	45	45
Kaimuki	18,518	1,055	14,811	922	3,615	501	136	84	43	56	10,153	783	784	289	80	47
Diamond Head	18,860	1,095	14,899	1,000	4,442	615	155	112	38	29	9,276	825	849	319	139	88
Palolo	13,197	1,081	10,216	1,004	1,814	407	79	90	0	0	6,378	735	1,892	667	53	49
Manoa	24,241	1,235	19,310	1,032	5,096	572	164	73	40	50	12,946	861	901	388	163	104
McCully/Moiliili	27,199	1,483	22,312	1,335	4,283	637	368	190	44	38	14,533	1,131	2,663	584	421	203
Waikiki	17,901	954	16,149	948	7,658	619	689	438	17	20	6,902	699	712	242	171	123
Makiki	31,591	1,534	25,882	1,416	6,355	607	817	353	77	58	15,596	1,105	2,778	930	259	160
Ala Moana/Kakaako	23,045	1,468	19,618	1,349	3,330	484	321	184	0	0	14,879	1,186	851	442	237	230
Nuuanu/Punchbowl	17,217	1,393	12,272	1,128	2,344	433	265	223	0	0	7,204	803	2,374	754	85	79
Downtown	12,956	837	11,452	815	2,257	300	248	133	15	21	7,714	561	1,085	562	133	82
Liliha/Kapalama	23,494	1,466	18,209	1,352	2,072	352	77	55	10	15	14,439	1,303	1,509	460	102	79
Kalihi-Palama	42,378	2,180	35,632	2,002	2,098	490	318	134	48	39	26,886	1,837	6,106	858	176	92
Kalihi Valley	21,082	1,592	16,955	1,551	793	219	122	163	0	0	13,217	1,426	2,727	689	96	94
Moanalua	9,231	922	7,087	793	1,788	372	394	178	0	0	4,108	629	602	361	195	149
Aliamanu	39,136	1,820	32,196	1,670	6,775	758	2,002	553	138	95	20,610	1,414	2,034	629	637	239
Airport Area	23,764	1,224	21,068	1,103	14,539	1,053	2,787	565	83	65	2,108	392	313	266	1,238	337
Aiea	32,817	1,624	24,131	1,444	4,628	556	835	285	38	41	15,228	1,219	3,077	670	325	132
Waiau/Pacific Palisades	45,605	1,734	33,656	1,508	6,036	610	901	244	62	63	23,707	1,309	2,307	615	643	268
EWA	**121,520**	**3,739**	**86,647**	**3,302**	**22,810**	**1,473**	**3,929**	**794**	**210**	**113**	**47,261**	**2,739**	**11,189**	**1,763**	**1,248**	**403**
Ewa Villages/Honouliuli	6,585	1,073	4,823	931	220	97	61	96	20	33	4,297	935	224	148	1	2
Ewa Gentry/West Loch	33,616	1,749	24,272	1,663	5,122	762	1,047	338	52	54	15,344	1,540	2,135	756	572	247
Ewa Beach/Iroquois Point	19,492	1,709	14,559	1,486	3,556	469	536	229	23	39	8,379	1,343	1,824	609	241	192
Ocean Pointe	13,153	976	9,857	903	4,365	692	576	195	66	75	4,062	674	675	476	113	108
Kalaeloa/Campbell Industrial Park	2,491	440	1,733	360	532	168	238	182	33	36	295	102	613	301	22	38
Ko Olina/Honokai Hale	2,961	377	2,410	347	1,251	184	41	27	0	0	691	210	411	275	16	24
City Of Kapolei	2,980	403	2,517	406	949	249	188	259	0	0	1,207	302	43	48	130	195
Kapolei Villages	16,899	1,634	10,538	1,443	1,737	423	135	88	0	0	5,937	1,014	2,685	1,088	44	47
Kapolei East	3,541	892	1,355	438	122	92	20	30	1	4	539	283	658	348	15	22
Makakilo/Makaiwa Hills/Kunia	19,802	1,389	14,583	1,250	4,956	755	1,087	554	15	19	6,510	866	1,921	667	94	102

TABLE A-4, CONTINUED

DP SUBAREA	TOTAL POPULATION		THOSE WHO REPORTED ONE RACE													
			One Race		White		Black or African American		American Indian and Alaska Native		Asian Alone		Native Hawaiian and Other Pacific Islander		Some Other Race	
	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
CENTRAL OAHU	**171,206**	**4,103**	**133,307**	**3,639**	**29,692**	**1,652**	**5,757**	**769**	**316**	**177**	**82,024**	**3,063**	**13,746**	**1,762**	**1,772**	**362**
Village Park/Kunia	14,880	1,545	12,387	1,353	1,178	298	260	139	39	45	9,475	1,369	1,315	664	120	52
Waipahu	39,923	2,459	34,661	2,335	1,598	417	220	127	19	44	26,934	2,059	5,777	1,233	113	75
Waikele	7,442	935	5,407	703	1,632	509	136	93	0	0	3,184	460	354	306	101	148
Waipio	11,649	787	8,737	642	1,114	248	145	114	1	2	6,486	588	813	295	178	115
Waiawa	435	156	244	96	65	41	4	7	0	0	67	51	96	68	12	28
Mililani	33,013	1,423	22,157	1,172	5,149	593	621	233	8	12	14,560	1,046	1,606	443	213	88
Mililani Mauka/Launani	20,090	778	15,374	772	3,176	449	441	234	32	34	11,222	762	374	154	129	68
Wahiawa/Whitmore	21,944	1,620	15,746	1,325	3,281	705	366	159	0	0	9,209	991	2,698	778	192	122
Schofield/Wheeler	21,830	1,278	18,594	1,147	12,499	1,046	3,564	633	217	161	887	227	713	361	714	244
EAST HONOLULU	**47,540**	**1,307**	**37,893**	**1,324**	**12,658**	**990**	**318**	**220**	**38**	**31**	**23,123**	**1,012**	**1,609**	**438**	**147**	**86**
Hawaii Kai	29,066	1,337	23,381	1,178	8,654	791	277	215	18	17	13,177	942	1,134	427	121	83
Kuliouou-Kalani Iki	15,922	928	12,280	795	3,494	515	38	46	10	18	8,333	647	379	142	26	25
Waialae Nui/Country Club	2,552	182	2,232	187	510	142	3	6	10	17	1,613	202	96	80	0	0
KOOLAU POKO	**112,829**	**2,910**	**80,420**	**2,390**	**39,753**	**1,645**	**1,648**	**374**	**330**	**137**	**28,106**	**1,488**	**9,435**	**1,113**	**1,148**	**263**
Kahaluu	13,220	1,165	8,626	890	3,145	541	30	39	76	80	3,878	568	1,400	555	97	74
Kaneohe	38,409	1,653	26,305	1,293	8,444	787	276	136	81	48	14,475	1,018	2,891	581	138	79
Kailua	40,269	1,576	29,702	1,358	18,699	1,043	459	166	82	52	7,991	729	2,117	505	354	135
Waimanalo	9,642	1,068	5,418	791	963	230	21	21	7	9	1,392	546	3,002	580	33	22
Mokapu	11,289	868	10,369	882	8,502	809	862	303	84	85	370	163	25	30	526	196
KOOLAU LOA	**15,092**	**1,124**	**10,285**	**852**	**4,634**	**592**	**147**	**102**	**52**	**45**	**1,695**	**264**	**3,658**	**659**	**99**	**62**
Kahuku/Kawela	2,402	421	1,665	268	454	155	72	93	0	0	459	130	680	219	0	0
Laie	7,754	898	5,674	718	2,724	518	22	31	46	44	834	205	1,969	527	79	60
Hauula/Punaluu	3,804	489	2,259	357	1,031	223	47	26	0	0	311	98	856	324	14	13
Kaaawa	1,132	201	687	107	425	93	6	10	6	9	91	35	153	61	6	9
NORTH SHORE	**17,679**	**1,402**	**13,733**	**1,226**	**9,332**	**1,108**	**434**	**181**	**89**	**82**	**2,999**	**592**	**760**	**364**	**119**	**75**
Mokuleia	2,341	368	1,956	337	1,674	296	37	30	12	20	166	85	33	26	34	31
Waialua	3,175	453	2,340	390	960	253	0	0	1	2	1,199	279	161	145	19	22
Haleiwa	3,566	645	2,278	478	1,190	341	10	16	28	36	637	200	376	315	37	35
Kawailoa	4,008	597	3,103	498	2,168	555	364	174	48	71	418	242	76	57	29	55
Sunset Beach/Pupukea	4,589	924	4,056	872	3,340	807	23	34	0	0	579	409	114	91	0	0
WAIANAE	**49,971**	**2,758**	**32,238**	**2,388**	**5,115**	**567**	**672**	**240**	**212**	**154**	**5,746**	**982**	**19,892**	**2,130**	**601**	**308**
Nanakuli	11,900	951	7,633	852	451	164	85	60	93	88	886	328	6,106	788	12	13
Maili	12,197	1,872	8,405	1,670	1,369	369	145	104	86	116	2,033	799	4,356	1,418	416	295
Waianae	16,467	1,382	10,218	1,183	1,543	296	126	98	33	49	1,997	414	6,443	1,093	76	45
Makaha/Kaena	9,407	1,135	5,982	887	1,752	266	316	182	0	0	830	214	2,987	845	97	77

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.
SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-5: POPULATION, HOUSING UNITS, HOUSEHOLDS, AND INCOME BY NEIGHBORHOOD AREA

	NEIGHBORHOOD AREA	POPULATION		TOTAL HOUSING UNITS		HOUSEHOLDS		AVERAGE HOUSEHOLD SIZE		MEDIAN HOUSEHOLD INCOME
		Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate ($)
	HONOLULU COUNTY TOTALS	**984,821**	**0**	**350,571**	**317**	**312,795**	**1,538**	**3.03**	**0.02**	**85,857**
1	Hawaii Kai	29,066	1,337	11,430	369	10,254	393	2.83	0.17	126,030
2	Kuliouou-Kalani Iki	15,922	928	6,071	245	5,314	246	2.97	0.22	148,090
3	Waialae-Kahala	9,304	605	4,074	193	3,678	197	2.51	0.21	115,012
4	Kaimuki	18,518	1,055	6,980	287	6,122	286	2.96	0.22	101,373
5	Diamond Head-Kapahulu	18,860	1,095	8,727	347	7,387	339	2.53	0.19	81,118
6	Palolo	13,197	1,081	4,660	238	4,226	255	3.08	0.31	72,971
7	Manoa	24,241	1,235	7,671	309	6,955	307	2.81	0.20	100,098
8	McCully-Moiliili	27,199	1,483	14,290	504	12,526	519	2.12	0.15	54,011
9	Waikiki	17,901	954	19,324	526	10,531	507	1.68	0.12	59,702
10	Makiki-Tantalus	31,591	1,534	17,440	625	15,920	608	1.96	0.12	62,591
11	Ala Moana-Kakaako	23,045	1,468	14,998	630	11,952	604	1.92	0.16	62,887
12	Nuuanu-Punchbowl	17,217	1,393	6,913	388	6,028	388	2.81	0.29	93,228
13	Downtown-Chinatown	12,956	837	7,954	327	7,004	340	1.84	0.15	55,431
14	Liliha/Alewa	23,494	1,466	6,929	313	6,487	311	3.40	0.28	87,557
15	Kalihi-Palama	42,378	2,180	11,655	404	10,959	411	3.62	0.24	54,392
16	Kalihi Valley	21,082	1,592	4,630	250	4,397	254	4.71	0.45	98,123
17	Moanalua	9,231	922	3,234	219	2,969	211	2.95	0.37	87,478
18	Aliamanu-Salt Lake	39,136	1,820	12,886	433	12,057	441	3.20	0.19	84,575
19	Airport	23,764	1,224	6,722	314	6,320	326	3.23	0.24	75,000
20	Aiea	39,489	1,733	13,522	433	12,825	437	3.01	0.17	94,573
21	Pearl City	39,368	1,633	12,278	334	11,743	346	3.17	0.17	94,318
22	Waipahu	73,579	3,142	19,750	556	18,925	567	3.80	0.20	92,092
23	Ewa	74,592	2,935	20,806	511	19,748	526	3.76	0.18	104,945
24	Waianae Coast	25,874	1,789	7,798	311	6,493	325	3.83	0.33	61,821
25	Mililani-Waipio	33,013	1,423	10,916	322	10,576	328	3.12	0.17	95,876
26	Wahiawa	44,089	2,077	13,219	475	12,257	496	3.21	0.21	63,153
27	North Shore	17,679	1,402	6,766	354	5,531	349	3.16	0.32	84,408
28	Koolauloa	15,092	1,124	4,540	232	3,368	204	3.87	0.40	86,494
29	Kahaluu	13,220	1,165	4,399	218	4,139	228	3.17	0.33	114,172
30	Kaneohe	38,409	1,653	12,835	366	12,103	370	3.11	0.16	111,012
31	Kailua	40,269	1,576	14,112	383	13,184	372	2.98	0.15	115,292
32	Waimanalo	9,642	1,068	2,435	192	2,226	181	4.31	0.59	92,977
33	Mokapu	11,289	868	2,814	204	2,617	207	2.97	0.34	59,878
34	Makakilo/Kapolei	46,928	2,316	14,665	454	13,408	459	3.43	0.21	104,107
35	Mililani Mauka/Launani Valley	20,090	778	7,275	210	6,961	224	2.88	0.15	113,172
36	Nanakuli-Maili	24,097	2,100	5,853	364	5,605	355	4.14	0.45	78,994

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.

SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-6: HOUSING UNITS, TENURE, AND VACANCY RATES BY NEIGHBORHOOD AREA

		OCCUPIED HOUSING UNITS								VACANT HOUSING UNITS					
		Occupied Units		Owner Occupied		Renter Occupied		Home Ownership Rate		Vacant Units		Vacancy Rate (Owner)		Vacancy Rate (Rentals)	
	NEIGHBORHOOD AREA	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
	HONOLULU COUNTY TOTALS	**312,795**	**1,538**	**175,751**	**2,028**	**137,044**	**1,823**	**56%**	**1%**	**37,776**	**1,512**	**1%**	**0%**	**5%**	**1%**
1	Hawaii Kai	10,254	393	8,213	353	2,041	302	80%	5%	1,176	292	1%	1%	6%	5%
2	Kuliouou-Kalani Iki	5,314	246	4,726	242	588	144	89%	6%	757	190	1%	1%	5%	8%
3	Waialae-Kahala	3,678	197	2,671	184	1,007	182	73%	6%	396	145	2%	2%	2%	2%
4	Kaimuki	6,122	286	4,125	265	1,997	241	67%	5%	858	210	0%	0%	6%	4%
5	Diamond Head-Kapahulu	7,387	339	4,026	285	3,361	318	55%	5%	1,340	252	4%	3%	4%	3%
6	Palolo	4,226	255	2,254	206	1,972	242	53%	6%	434	143	2%	2%	7%	4%
7	Manoa	6,955	307	4,377	267	2,578	272	63%	5%	716	219	1%	1%	9%	5%
8	McCully-Moiliili	12,526	519	3,724	322	8,802	529	30%	3%	1,764	353	1%	1%	6%	2%
9	Waikiki	10,531	507	4,232	351	6,299	451	40%	4%	8,793	551	4%	3%	23%	4%
10	Makiki-Tantalus	15,920	608	6,806	451	9,114	595	43%	3%	1,520	368	3%	2%	6%	2%
11	Ala Moana-Kakaako	11,952	604	4,297	406	7,655	569	36%	4%	3,046	522	2%	2%	6%	3%
12	Nuuanu-Punchbowl	6,028	388	3,437	286	2,591	350	57%	6%	885	273	2%	3%	9%	6%
13	Downtown-Chinatown	7,004	340	2,301	218	4,703	333	33%	4%	950	212	0%	0%	8%	3%
14	Liliha/Alewa	6,487	311	3,776	262	2,711	277	58%	5%	442	145	0%	0%	0%	0%
15	Kalihi-Palama	10,959	411	3,108	263	7,851	407	28%	3%	696	169	0%	0%	4%	1%
16	Kalihi Valley	4,397	254	2,668	212	1,729	221	61%	6%	233	90	1%	1%	1%	1%
17	Moanalua	2,969	211	1,466	153	1,503	171	49%	6%	265	123	2%	2%	3%	3%
18	Aliamanu-Salt Lake	12,057	441	6,439	359	5,618	433	53%	4%	829	227	1%	1%	2%	2%
19	Airport	6,320	326	43	19	6,277	326	1%	0%	402	139	0%	0%	3%	2%
20	Aiea	12,825	437	8,157	362	4,668	429	64%	4%	697	207	1%	1%	2%	2%
21	Pearl City	11,743	346	7,809	321	3,934	278	66%	3%	535	177	0%	1%	5%	3%
22	Waipahu	18,925	567	12,147	478	6,778	507	64%	3%	825	234	0%	0%	5%	2%
23	Ewa	19,748	526	13,900	518	5,848	463	70%	3%	1,058	248	1%	1%	4%	2%
24	Waianae Coast	6,493	325	3,365	251	3,128	303	52%	5%	1,305	211	1%	0%	4%	3%
25	Mililani-Waipio	10,576	328	8,064	332	2,512	276	76%	4%	340	141	1%	1%	4%	3%
26	Wahiawa	12,257	496	3,423	323	8,834	481	28%	3%	962	206	0%	0%	2%	1%
27	North Shore	5,531	349	2,719	251	2,812	296	49%	5%	1,235	258	3%	3%	1%	1%
28	Koolauloa	3,368	204	1,761	156	1,607	165	52%	6%	1,172	148	1%	1%	3%	2%
29	Kahaluu	4,139	228	3,258	226	881	174	79%	7%	260	123	2%	2%	0%	0%
30	Kaneohe	12,103	370	8,930	359	3,173	301	74%	4%	732	203	1%	1%	4%	3%
31	Kailua	13,184	372	9,613	364	3,571	314	73%	3%	928	206	0%	0%	3%	2%
32	Waimanalo	2,226	181	1,679	167	547	127	75%	10%	209	98	0%	0%	0%	0%
33	Mokapu	2,617	207	21	21	2,596	207	1%	1%	197	107	0%	0%	1%	2%
34	Makakilo/Kapolei	13,408	459	9,035	414	4,373	416	67%	4%	1,257	224	1%	1%	4%	2%
35	Mililani Mauka/Launani Valley	6,961	224	5,513	244	1,448	232	79%	4%	314	145	0%	0%	2%	2%
36	Nanakuli-Maili	5,605	355	3,668	310	1,937	311	65%	7%	248	131	0%	0%	0%	0%

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.

SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-7: POPULATION BY AGE AND SEX BY NEIGHBORHOOD AREA

		AGE											SEX			
			Under Age 18		Age 18 to 19		Age 20 to 21		Age 22 to 64		Age 65 and Over		Male		Female	
	NEIGHBORHOOD AREA	MEDIAN AGE	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
	HONOLULU COUNTY TOTALS	**37.9**	**209,223**	**1,450**	**21,638**	**60**	**27,966**	**1,059**	**555,625**	**2,576**	**170,369**	**2,145**	**496,066**	**50**	**488,755**	**50**
1	Hawaii Kai	47	6,076	546	514	137	436	136	14,943	776	7,097	496	14,427	783	14,639	757
2	Kuliouou-Kalani Iki	50	2,849	339	249	99	278	113	8,493	519	4,053	323	7,962	526	7,960	539
3	Waialae-Kahala	54	1,454	205	101	50	89	53	4,527	372	3,133	295	4,603	376	4,701	351
4	Kaimuki	48	2,827	329	312	154	249	92	10,370	606	4,760	385	9,100	624	9,418	594
5	Diamond Head-Kapahulu	44	2,585	343	269	102	504	163	11,569	695	3,933	354	9,216	658	9,644	642
6	Palolo	42	2,147	310	199	81	268	100	7,825	627	2,758	330	6,765	630	6,432	615
7	Manoa	38	3,542	368	1,926	326	1,697	287	12,034	700	5,042	395	11,763	729	12,478	780
8	McCully-Moiliili	41	3,948	491	473	160	1,026	313	17,254	951	4,498	428	13,529	891	13,670	901
9	Waikiki	44	1,644	298	274	152	264	125	12,018	759	3,701	355	9,355	642	8,546	569
10	Makiki-Tantalus	46	4,036	512	326	133	482	199	19,292	1,080	7,455	565	15,201	935	16,390	965
11	Ala Moana-Kakaako	44	3,170	570	276	124	246	107	14,448	927	4,905	535	11,223	890	11,822	866
12	Nuuanu-Punchbowl	43	3,312	459	292	139	373	163	9,513	744	3,727	375	8,624	787	8,593	768
13	Downtown-Chinatown	48	1,555	309	131	92	182	90	7,994	574	3,094	310	6,421	532	6,535	489
14	Liliha/Alewa	44	4,270	466	339	113	522	167	12,834	733	5,529	407	11,302	826	12,192	830
15	Kalihi-Palama	38	8,156	613	1,404	263	1,472	256	24,211	1,038	7,135	523	21,671	1,226	20,707	1,264
16	Kalihi Valley	42	4,175	411	543	140	544	155	12,101	706	3,719	357	10,595	881	10,487	846
17	Moanalua	42	2,025	336	159	86	240	108	4,811	468	1,996	268	4,555	526	4,676	527
18	Aliamanu-Salt Lake	36	9,342	708	519	144	770	173	22,125	978	6,380	506	19,606	1,003	19,530	1,053
19	Airport	25	8,116	566	657	180	1,223	252	13,623	693	145	60	13,445	810	10,319	633
20	Aiea	41	7,242	619	686	165	1,048	225	22,731	1,033	7,782	483	20,183	1,041	19,306	990
21	Pearl City	40	7,658	609	1,039	217	1,399	308	20,254	872	9,018	519	20,106	957	19,262	970
22	Waipahu	39	15,145	934	1,556	273	1,653	297	42,655	1,464	12,570	741	36,275	1,738	37,304	1,700
23	Ewa	35	20,393	1,098	1,187	235	1,451	276	42,911	1,478	8,650	625	36,935	1,602	37,657	1,677
24	Waianae Coast	34	7,754	632	535	152	615	152	13,632	724	3,338	310	12,479	1,011	13,395	973
25	Mililani-Waipio	41	6,824	549	484	145	895	198	18,158	797	6,652	434	16,919	858	16,094	777
26	Wahiawa	26	12,470	843	1,140	243	2,786	411	23,217	1,025	4,476	483	24,329	1,298	19,760	1,057
27	North Shore	34	4,131	452	275	106	446	172	10,321	710	2,506	285	9,007	804	8,672	759
28	Koolauloa	29	4,042	371	893	212	734	168	7,757	494	1,666	189	7,724	684	7,368	627
29	Kahaluu	46	2,627	385	253	113	280	145	7,108	552	2,952	316	6,700	665	6,520	631
30	Kaneohe	44	7,265	582	613	151	502	123	21,798	893	8,231	495	18,960	923	19,449	939
31	Kailua	42	7,977	568	823	198	1,071	219	22,329	862	8,069	465	19,683	889	20,586	948
32	Waimanalo	38	2,345	312	317	120	353	142	4,895	394	1,732	228	4,777	601	4,865	597
33	Mokapu	22	2,896	371	769	216	1,639	298	5,985	514	0	0	7,461	730	3,828	347
34	Makakilo/Kapolei	33	13,007	902	1,006	231	1,082	233	27,212	1,149	4,621	420	23,285	1,330	23,643	1,275
35	Mililani Mauka/Launani Valley	39	4,985	407	408	112	446	126	11,941	593	2,310	345	10,122	487	9,968	516
36	Nanakuli-Maili	32	7,233	751	691	188	701	212	12,736	838	2,736	365	11,758	1,129	12,339	1,214

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.
SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

TABLE A-8: RACE BY NEIGHBORHOOD AREA

	NEIGHBORHOOD AREA	TOTAL POPULATION		THOSE WHO REPORTED ONE RACE													
				One Race		White		Black or African American		American Indian and Alaska Native		Asian Alone		NHOPI		Some Other Race	
		Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)	Estimate	MOE (+ -)
	HONOLULU COUNTY TOTALS	**984,821**	**0**	**756,126**	**3,801**	**206,218**	**1,246**	**23,603**	**962**	**1,900**	**289**	**420,093**	**3,068**	**93,980**	**1,799**	**10,332**	**1,019**
1	Hawaii Kai	29,066	1,337	23,381	1,178	8,654	791	277	215	18	17	13,177	942	1,134	427	121	83
2	Kuliouou-Kalani Iki	15,922	928	12,280	795	3,494	515	38	46	10	18	8,333	647	379	142	26	25
3	Waialae-Kahala	9,304	605	7,980	573	2,811	422	23	26	10	17	4,868	424	223	148	45	45
4	Kaimuki	18,518	1,055	14,811	922	3,615	501	136	84	43	56	10,153	783	784	289	80	47
5	Diamond Head-Kapahulu	18,860	1,095	14,899	1,000	4,442	615	155	112	38	29	9,276	825	849	319	139	88
6	Palolo	13,197	1,081	10,216	1,004	1,814	407	79	90	0	0	6,378	735	1,892	667	53	49
7	Manoa	24,241	1,235	19,310	1,032	5,096	572	164	73	40	50	12,946	861	901	388	163	104
8	McCully-Moiliili	27,199	1,483	22,312	1,335	4,283	637	368	190	44	38	14,533	1,131	2,663	584	421	203
9	Waikiki	17,901	954	16,149	948	7,658	619	689	438	17	20	6,902	699	712	242	171	123
10	Makiki-Tantalus	31,591	1,534	25,882	1,416	6,355	607	817	353	77	58	15,596	1,105	2,778	930	259	160
11	Ala Moana-Kakaako	23,045	1,468	19,618	1,349	3,330	484	321	184	0	0	14,879	1,186	851	442	237	230
12	Nuuanu-Punchbowl	17,217	1,393	12,272	1,128	2,344	433	265	223	0	0	7,204	803	2,374	754	85	79
13	Downtown-Chinatown	12,956	837	11,452	815	2,257	300	248	133	15	21	7,714	561	1,085	562	133	82
14	Liliha/Alewa	23,494	1,466	18,209	1,352	2,072	352	77	55	10	15	14,439	1,303	1,509	460	102	79
15	Kalihi-Palama	42,378	2,180	35,632	2,002	2,098	490	318	134	48	39	26,886	1,837	6,106	858	176	92
16	Kalihi Valley	21,082	1,592	16,955	1,551	793	219	122	163	0	0	13,217	1,426	2,727	689	96	94
17	Moanalua	9,231	922	7,087	793	1,788	372	394	178	0	0	4,108	629	602	361	195	149
18	Aliamanu-Salt Lake	39,136	1,820	32,196	1,670	6,775	758	2,002	553	138	95	20,610	1,414	2,034	629	637	239
19	Airport	23,764	1,224	21,068	1,103	14,539	1,053	2,787	565	83	65	2,108	392	313	266	1,238	337
20	Aiea	39,489	1,733	29,433	1,535	5,142	587	931	301	38	41	19,838	1,323	3,142	673	342	133
21	Pearl City	39,368	1,633	28,598	1,418	5,587	582	809	224	62	63	19,164	1,204	2,338	616	638	268
22	Waipahu	73,579	3,142	60,877	2,852	5,522	763	761	239	59	63	45,764	2,572	8,259	1,464	512	208
23	Ewa	74,592	2,935	54,096	2,594	13,328	1,138	2,240	463	162	106	32,513	2,361	4,924	1,094	929	331
24	Waianae Coast	25,874	1,789	16,200	1,478	3,295	398	442	207	33	49	2,827	466	9,430	1,381	173	89
25	Mililani-Waipio	33,013	1,423	22,157	1,172	5,149	593	621	233	8	12	14,560	1,046	1,606	443	213	88
26	Wahiawa	44,089	2,077	34,655	1,768	15,780	1,262	3,930	652	217	161	10,411	1,044	3,411	857	906	273
27	North Shore	17,679	1,402	13,733	1,226	9,332	1,108	434	181	89	82	2,999	592	760	364	119	75
28	Koolauloa	15,092	1,124	10,285	852	4,634	592	147	102	52	45	1,695	264	3,658	659	99	62
29	Kahaluu	13,220	1,165	8,626	890	3,145	541	30	39	76	80	3,878	568	1,400	555	97	74
30	Kaneohe	38,409	1,653	26,305	1,293	8,444	787	276	136	81	48	14,475	1,018	2,891	581	138	79
31	Kailua	40,269	1,576	29,702	1,358	18,699	1,043	459	166	82	52	7,991	729	2,117	505	354	135
32	Waimanalo	9,642	1,068	5,418	791	963	230	21	21	7	9	1,392	546	3,002	580	33	22
33	Mokapu	11,289	868	10,369	882	8,502	809	862	303	84	85	370	163	25	30	526	196
34	Makakilo/Kapolei	46,928	2,316	32,551	2,044	9,482	936	1,689	644	48	41	14,748	1,389	6,265	1,383	319	230
35	Mililani Mauka/Launani Valley	20,090	778	15,374	772	3,176	449	441	234	32	34	11,222	762	374	154	129	68
36	Nanakuli-Maili	24,097	2,100	16,038	1,875	1,820	404	230	120	179	146	2,919	864	10,462	1,622	428	295

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error.
SOURCE: Compiled by the Department of Planning and Permitting based on the 2015-2019 American Community Survey 5 Year Estimates.

APPENDIX B: MASTER LIST OF KNOWN PROJECTS

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TABLE B-1: LIST OF KNOWN PROJECTS

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
OAHU TOTAL			**86,078**			**22,568**	**1,052**	**1,344**	**1,561**	**2,998**	**3,312**	**53,243**
1500 Kapiolani	109	P	84	2031	2031	0	0	0	0	0	0	84
432 Kalaimoku	107	P	6	2029	2029	0	0	0	0	0	0	6
436 Ena Road	107	C	33	2021	2021	0	0	33	0	0	0	0
690 Pohukaina	109	P	590	2027	2027	0	0	0	0	0	0	590
754 McCully	106	C	10	2021	2021	0	0	10	0	0	0	0
820 Isenberg Street Redevelopment	106	P	277	2024	2024	0	0	0	0	0	277	0
888 Ala Moana Boulevard	109	P	262	2040	2040	0	0	0	0	0	0	262
900 Green Valley	306	P	48	2030	2039	0	0	0	0	0	0	48
Aalii	109	C	751	2023	2023	0	0	0	0	751	0	0
Ala Moana Plaza	109	P	583	2030	2030	0	0	0	0	0	0	583
Aloha Hale Pokai Bay	804	P	8	2030	2030	0	0	0	0	0	0	8
Atkinson YMCA	109	P	128	2040	2040	0	0	0	0	0	0	128
Azure Ala Moana	109	C	408	2023	2023	0	0	0	0	408	0	0
BYU Hawaii Campus	602	P	200	2042	2043	0	0	0	0	0	0	200
Castle and Cooke Waiawa	305	P	1,500	2040	2043	0	0	0	0	0	0	1,500
City of Kapolei Mixed Use	207	P	500	2027	2028	0	0	0	0	0	0	500
East Kapolei (DHHL) Kanehili	209	C	403	2009	2021	362	13	28	0	0	0	0
East Kapolei II (DHHL)	209	C	1,433	2019	2030	76	24	12	32	288	68	933
East Kapolei II Keahumoa Place	209	C	320	2019	2020	75	245	0	0	0	0	0
Ewa Makai by Gentry	202	C	1,634	2009	2021	1,603	24	7	0	0	0	0
Ewa Villages (completed)	201	C	797	2006	2006	797	0	0	0	0	0	0
Ewa by Gentry	202	C	6,853	2009	2024	6,445	58	80	104	96	70	0
Franciscan Vistas Ewa	201	C	293	2011	2030	150	0	0	0	0	0	143
H & M Apartments	107	P	200	2031	2032	0	0	0	0	0	0	200

TABLE B-1, CONTINUED

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
Halawa View Apartments	118	P	302	2026	2026	0	0	0	0	0	0	302
Hale Kalele	109	P	201	2026	2026	0	0	0	0	0	0	201
Hale Laulima Redevelopment (HPHA)	119	P	960	2028	2032	0	0	0	0	0	0	960
Hale Makana O Maili	802	C	52	2021	2021	0	0	52	0	0	0	0
Hale Makana O Moiliili	106	P	105	2027	2027	0	0	0	0	0	0	105
Hale Punawai	113	C	21	2021	2021	0	0	21	0	0	0	0
Hale Uhiwai Nalu Phase 2	205	P	50	2025	2025	0	0	0	0	0	0	50
Haleiwa Mixed Use	703	P	156	2031	2033	0	0	0	0	0	0	156
Halewaiolu Senior Residences	111	C	156	2024	2024	0	0	0	0	0	156	0
Halewiliko Highlands	118	P	140	2024	2024	0	0	0	0	0	140	0
Harbor Arms Apartments	118	P	29	2029	2029	0	0	0	0	0	0	29
Hawaii City Plaza	109	P	184	2030	2030	0	0	0	0	0	0	184
Hawaii Loa Ridge	402	C	522	2009	2031	499	1	0	2	0	0	20
Hawaii Ocean Plaza	109	P	216	2028	2028	0	0	0	0	0	0	216
Hawaii State Veterans Home	207	P	120	2028	2028	0	0	0	0	0	0	120
Hokupaa	401	P	14	2031	2032	0	0	0	0	0	0	14
Hoopili	209	C	11,750	2018	2035	573	257	684	501	497	332	8,906
Ililani	109	P	328	2024	2024	0	0	0	0	0	328	0
Iwilei Affordable Housing & Homeless Resource Center	113	P	27	2028	2028	0	0	0	0	0	0	27
JC Building Group	106	P	21	2026	2026	0	0	0	0	0	0	21
KCR Development Rentals	109	P	612	2031	2031	0	0	0	0	0	0	612
KPT Redevelopment, Phase 2 (HPHA)	113	P	250	2032	2033	0	0	0	0	0	0	250
Kaala Highlands	308	C	25	2023	2025	0	0	0	0	8	8	9

TABLE B-1, CONTINUED

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
Kahala Loa Cluster	102	P	16	2031	2031	0	0	0	0	0	0	16
Kakaina Subdivision	504	C	45	2018	2023	22	2	7	7	7	0	0
Kalaeloa Master Plan	205	P	4,000	2031	2050	0	0	0	0	0	0	4,000
Kalanihuia Redevelopment (HPHA)	113	P	350	2027	2028	0	0	0	0	0	0	350
Kamehameha Homes & Kaahumanu Redevelopment (HPHA)	113	P	2,127	2030	2039	0	0	0	0	0	0	2,127
Kanakila Affordable Housing (HPHA)	112	P	800	2030	2032	0	0	0	0	0	0	800
Kaonohi Makai	118	P	1,866	2033	2042	0	0	0	0	0	0	1,866
Kapolei West	205	P	2,500	2031	2042	0	0	0	0	0	0	2,500
Kauhale Village-Waimanalo	504	P	11	2028	2028	0	0	0	0	0	0	11
Kaukamana Hale	802	P	14	2032	2032	0	0	0	0	0	0	14
Kealii by Gentry	209	C	66	2020	2022	0	7	37	22	0	0	0
Kihapai Place Apartments	503	P	42	2026	2026	0	0	0	0	0	0	42
Kilanikoa Development	308	C	18	2019	2028	1	3	0	2	2	2	8
Ko Olina	206	C	4,450	2009	2030	1,164	0	0	0	0	0	3,286
Koa Ridge	304	C	3,500	2021	2032	0	0	200	200	200	300	2,600
Kokea Center	113	P	309	2035	2035	0	0	0	0	0	0	309
Kokua Senior Affordable Housing	111	P	223	2026	2026	0	0	0	0	0	0	223
Koula	109	C	565	2024	2024	0	0	0	0	0	565	0
Kulana Hale II (Kapolei Mixed Use)	207	C	297	2020	2022	0	154	0	143	0	0	0
Kumuwai	106	C	30	2020	2020	0	30	0	0	0	0	0
Leoole Subdivision	703	P	25	2045	2045	0	0	0	0	0	0	25
Lilia Waikiki	107	P	401	2022	2022	0	0	0	401	0	0	0

TABLE B-1, CONTINUED

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
Liliha Terrace Cluster	112	P	11	2026	2026	0	0	0	0	0	0	11
Live Work Play Aiea	118	P	1,401	2029	2036	0	0	0	0	0	0	1,401
Lydia's House	111	C	18	2021	2021	0	0	18	0	0	0	0
Maili (Voice of America)	802	P	250	2023	2024	0	0	0	0	125	125	0
Makaha Rental Housing	805	P	90	2031	2033	0	0	0	0	0	0	90
Makaha Valley Subdivision	805	P	100	2042	2042	0	0	0	0	0	0	100
Makaiwa Hills	210	P	4,200	2027	2039	0	0	0	0	0	0	4,200
Makakilo (completed)	210	C	2,320	2005	2005	2,320	0	0	0	0	0	0
Makakilo Heights Lots	210	C	395	2009	2024	386	1	0	2	1	5	0
Makua Alii & Paoakalani Redevelopment (HPHA)	109	P	490	2029	2031	0	0	0	0	0	0	490
Manaolana Place	109	P	109	2028	2028	0	0	0	0	0	0	109
Mandalay by the Park	302	P	40	2027	2027	0	0	0	0	0	0	40
Mauna Olu Cottages	805	C	120	2020	2022	0	22	60	38	0	0	0
Mayor Wright Homes Redevelopment (HPHA)	113	P	2,140	2028	2037	0	0	0	0	0	0	2,140
Meheula Vista	307	C	301	2017	2024	226	0	0	0	0	75	0
Mohala Mai	106	C	30	2021	2021	0	0	30	0	0	0	0
Moiliili Gateway (Puck's Alley)	106	P	330	2027	2029	0	0	0	0	0	0	330
Moiliili Gateway (Varsity)	106	P	360	2030	2032	0	0	0	0	0	0	360
Na Pali Haweo (by lot owners)	401	C	190	2009	2034	178	0	1	0	0	0	11
Nanaikeola Village	801	P	142	2030	2030	0	0	0	0	0	0	142
Nohona Hale	109	C	111	2020	2020	0	111	0	0	0	0	0

TABLE B-1, CONTINUED

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
North Laie	602	P	200	2042	2043	0	0	0	0	0	0	200
Ocean Pointe/Hoakalei Residences	203	C	4,850	2009	2030	3,975	1	0	0	50	100	724
Ohana Hale	106	P	180	2027	2027	0	0	0	0	0	0	180
Ola Ka Ilima Artspace Lofts	109	C	84	2020	2020	0	84	0	0	0	0	0
Olomana Heights	504	P	26	2019	2033	1	1	0	2	2	2	18
Pacific Island Investments	302	P	32	2027	2027	0	0	0	0	0	0	32
Palailai Residential	210	P	350	2031	2032	0	0	0	0	0	0	350
Pau Street Multifamily Dwelling	107	P	6	2025	2025	0	0	0	0	0	0	6
Pilina Homes	201	P	142	2023	2024	0	0	0	0	50	92	0
Pokai Bay	804	C	125	2008	2023	55	12	23	25	10	0	0
Puuwai Momi Redevelopment (HPHA)	118	P	1,240	2027	2033	0	0	0	0	0	0	1,240
Queen Emma Tower Redevelopment	111	C	71	2022	2022	0	0	0	71	0	0	0
Residence at Maunakea	111	C	39	2021	2021	0	0	39	0	0	0	0
Royal Kunia, Phase 2	301	P	1,850	2029	2036	0	0	0	0	0	0	1,850
Sky Ala Moana	109	P	474	2026	2026	0	0	0	0	0	0	474
Skyline Honolulu	110	P	110	2030	2030	0	0	0	0	0	0	110
Sunset Beach Colony (by lot owners)	705	C	24	2009	2028	18	0	0	0	1	0	5
The Block 803 Waimanu	109	C	153	2024	2024	0	0	0	0	0	153	0
The Central	109	C	513	2024	2024	0	0	0	0	0	513	0
The Park on Keeaumoku	109	P	964	2032	2032	0	0	0	0	0	0	964
The Residences at Bishop Place	111	P	493	2023	2023	0	0	0	0	493	0	0

TABLE B-1, CONTINUED

PROJECT NAME	DPSA	C/P*	TOTAL UNITS	START YEAR	END YEAR	UNITS COMPLETED		UNITS REMAINING				
						BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024
The Rise at Salt Lake	116	P	56	2026	2026	0	0	0	0	0	0	56
The Woods at Ahuimanu	501	P	44	2030	2030	0	0	0	0	0	0	44
Victoria Place	109	P	350	2027	2027	0	0	0	0	0	0	350
Villages of Kapolei (completed)	208	C	3,225	2008	2008	3,225	0	0	0	0	0	0
Wai Kaloi (Palehua East B)	210	C	275	2009	2022	268	2	2	3	0	0	0
Waialae Iki V, Phase 2	402	C	143	2009	2028	134	0	0	1	1	1	6
Waianae Increment 4	804	P	8	2023	2023	0	0	0	0	8	0	0
Waikalua Bayside	502	C	20	2017	2022	15	0	0	5	0	0	0
Waimanalo Residential and Subsistence Agriculture Lots (DHHL)	504	P	175	2028	2028	0	0	0	0	0	0	175
Waipahu I & II & Hoolulu/Kamalu Redevelopment (HPHA)	302	P	740	2030	2033	0	0	0	0	0	0	740
Waipahu Rentals	302	P	570	2027	2030	0	0	0	0	0	0	570
West Loch Affordable Housing	202	P	123	2026	2026	0	0	0	0	0	0	123
West Loch Modular Housing	202	P	58	2026	2026	0	0	0	0	0	0	58

*C/P: Committed or Proposed

TABLE B-2: AFFORDABLE HOUSING PROJECTS

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
OAHU TOTAL		**33,326**	**8,572**	**748**	**427**	**502**	**835**	**1,508**	**20,734**	**20,560**	**15,809**
1500 Kapiolani	109	78	0	0	0	0	0	0	78	78	78
432 Kalaimoku	107	0	0	0	0	0	0	0	0	6	0
436 Ena Road	107	33	0	0	33	0	0	0	0	33	33
690 Pohukaina	109	434	0	0	0	0	0	0	434	434	434
754 McCully	106	10	0	0	10	0	0	0	0	10	10
820 Isenberg Street Redevelopment	106	277	0	0	0	0	0	277	0	277	277
888 Ala Moana Boulevard	109	0	0	0	0	0	0	0	0	0	0
900 Green Valley	306	0	0	0	0	0	0	0	0	0	0
Aalii	109	150	0	0	0	0	150	0	0	0	0
Ala Moana Plaza	109	120	0	0	0	0	0	0	120	583	120
Aloha Hale Pokai Bay	804	0	0	0	0	0	0	0	0	0	0
Atkinson YMCA	109	39	0	0	0	0	0	0	39	0	0
Azure Ala Moana	109	78	0	0	0	0	78	0	0	78	78
BYU Hawaii Campus	602	0	0	0	0	0	0	0	0	0	0
Castle and Cooke Waiawa	305	450	0	0	0	0	0	0	450	0	0
City of Kapolei Mixed Use	207	150	0	0	0	0	0	0	150	500	150
East Kapolei (DHHL) Kanehili	209	403	362	13	28	0	0	0	0	0	0
East Kapolei II (DHHL)	209	500	76	24	12	32	288	68	0	500	500
East Kapolei II Keahumoa Place	209	320	75	245	0	0	0	0	0	320	320
Ewa Makai by Gentry	202	0	0	0	0	0	0	0	0	0	0
Ewa Villages (completed)	201	797	797	0	0	0	0	0	0	0	0
Ewa by Gentry	202	2,769	2,657	0	0	0	42	70	0	112	112
Franciscan Vistas Ewa	201	293	150	0	0	0	0	0	143	150	0

TABLE B-2, CONTINUED

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
H & M Apartments	107	0	0	0	0	0	0	0	0	200	0
Halawa View Apartments	118	302	0	0	0	0	0	0	302	302	302
Hale Kalele	109	201	0	0	0	0	0	0	201	201	201
Hale Laulima Redevelopment (HPHA)	119	960	0	0	0	0	0	0	960	960	960
Hale Makana O Maili	802	52	0	0	52	0	0	0	0	52	52
Hale Makana O Moiliili	106	105	0	0	0	0	0	0	105	105	105
Hale Punawai	113	21	0	0	21	0	0	0	0	21	21
Hale Uhiwai Nalu Phase 2	205	50	0	0	0	0	0	0	50	50	50
Haleiwa Mixed Use	703	156	0	0	0	0	0	0	156	156	156
Halewaiolu Senior Residences	111	156	0	0	0	0	0	156	0	156	156
Halewiliko Highlands	118	140	0	0	0	0	0	140	0	140	140
Harbor Arms Apartments	118	29	0	0	0	0	0	0	29	29	29
Hawaii City Plaza	109	37	0	0	0	0	0	0	37	37	37
Hawaii Loa Ridge	402	0	0	0	0	0	0	0	0	0	0
Hawaii Ocean Plaza	109	33	0	0	0	0	0	0	33	33	33
Hawaii State Veterans Home	207	0	0	0	0	0	0	0	0	120	0
Hokupaa	401	0	0	0	0	0	0	0	0	0	0
Hoopili	209	3,525	132	72	151	182	0	0	2,988	1,000	200
Ililani	109	197	0	0	0	0	0	197	0	0	0
Iwilei Affordable Housing & Homeless Resource Center	113	27	0	0	0	0	0	0	27	27	27
JC Building Group	106	21	0	0	0	0	0	0	21	21	21

TABLE B-2, CONTINUED

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
KCR Development Rentals	109	84	0	0	0	0	0	0	84	84	84
KPT Redevelopment, Phase 2 (HPHA)	113	250	0	0	0	0	0	0	250	250	250
Kaala Highlands	308	0	0	0	0	0	0	0	0	0	0
Kahala Loa Cluster	102	0	0	0	0	0	0	0	0	0	0
Kakaina Subdivision	504	45	22	2	7	7	7	0	0	0	0
Kalaeloa Master Plan	205	0	0	0	0	0	0	0	0	0	0
Kalanihuia Redevelopment (HPHA)	113	350	0	0	0	0	0	0	350	350	350
Kamehameha Homes & Kaahumanu Redevelopment (HPHA)	113	2,127	0	0	0	0	0	0	2,127	2,127	2,127
Kanakila Affordable Housing (HPHA)	112	800	0	0	0	0	0	0	800	800	800
Kaonohi Makai	118	373	0	0	0	0	0	0	373	0	0
Kapolei West	205	750	0	0	0	0	0	0	750	185	0
Kauhale Village-Waimanalo	504	11	0	0	0	0	0	0	11	11	11
Kaukamana Hale	802	14	0	0	0	0	0	0	14	0	0
Kealii by Gentry	209	8	0	1	3	4	0	0	0	0	0
Kihapai Place Apartments	503	0	0	0	0	0	0	0	0	42	0
Kilanikoa Development	308	0	0	0	0	0	0	0	0	0	0
Ko Olina	206	392	392	0	0	0	0	0	0	392	392
Koa Ridge	304	1,075	0	0	0	0	0	0	1,075	375	375
Kokea Center	113	0	0	0	0	0	0	0	0	110	0
Kokua Senior Affordable Housing	111	223	0	0	0	0	0	0	223	223	223

TABLE B-2, CONTINUED

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
Koula	109	62	0	0	0	0	0	62	0	0	0
Kulana Hale II (Kapolei Mixed Use)	207	297	0	154	0	143	0	0	0	297	297
Kumuwai	106	30	0	30	0	0	0	0	0	30	30
Leoole Subdivision	703	12	0	0	0	0	0	0	12	0	0
Lilia Waikiki	107	38	0	0	0	38	0	0	0	401	38
Liliha Terrace Cluster	112	11	0	0	0	0	0	0	11	0	0
Live Work Play Aiea	118	775	0	0	0	0	0	0	775	255	0
Lydia's House	111	18	0	0	18	0	0	0	0	18	18
Maili (Voice of America)	802	0	0	0	0	0	0	0	0	0	0
Makaha Rental Housing	805	90	0	0	0	0	0	0	90	90	90
Makaha Valley Subdivision	805	0	0	0	0	0	0	0	0	0	0
Makaiwa Hills	210	1,205	0	0	0	0	0	0	1,205	205	205
Makakilo (completed)	210	355	355	0	0	0	0	0	0	300	0
Makakilo Heights Lots	210	0	0	0	0	0	0	0	0	0	0
Makua Alii & Paoakalani Redevelopment (HPHA)	109	490	0	0	0	0	0	0	490	490	490
Manaolana Place	109	20	0	0	0	0	0	0	20	20	20
Mandalay by the Park	302	0	0	0	0	0	0	0	0	40	0
Mauna Olu Cottages	805	0	0	0	0	0	0	0	0	0	0
Mayor Wright Homes Redevelopment (HPHA)	113	1,290	0	0	0	0	0	0	1,290	2,140	1,290
Meheula Vista	307	301	226	0	0	0	0	75	0	301	301
Mohala Mai	106	30	0	0	30	0	0	0	0	30	30

TABLE B-2, CONTINUED

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
Moiliili Gateway (Puck's Alley)	106	198	0	0	0	0	0	0	198	330	198
Moiliili Gateway (Varsity)	106	216	0	0	0	0	0	0	216	360	216
Na Pali Haweo (by lot owners)	401	0	0	0	0	0	0	0	0	0	0
Nanaikeola Village	801	41	0	0	0	0	0	0	41	0	0
Nohona Hale	109	111	0	111	0	0	0	0	0	111	111
North Laie	602	100	0	0	0	0	0	0	100	0	0
Ocean Pointe/Hoakalei Residences	203	787	787	0	0	0	0	0	0	0	0
Ohana Hale	106	108	0	0	0	0	0	0	108	0	0
Ola Ka Ilima Artspace Lofts	109	84	0	84	0	0	0	0	0	84	84
Olomana Heights	504	0	0	0	0	0	0	0	0	0	0
Pacific Island Investments	302	0	0	0	0	0	0	0	0	0	0
Palailai Residential	210	105	0	0	0	0	0	0	105	0	0
Pau Street Multifamily Dwelling	107	0	0	0	0	0	0	0	0	0	0
Pilina Homes	201	0	0	0	0	0	0	0	0	0	0
Pokai Bay	804	70	0	12	23	25	10	0	0	0	0
Puuwai Momi Redevelopment (HPHA)	118	1,240	0	0	0	0	0	0	1,240	1,240	1,240
Queen Emma Tower Redevelopment	111	71	0	0	0	71	0	0	0	71	71
Residence at Maunakea	111	39	0	0	39	0	0	0	0	39	39
Royal Kunia, Phase 2	301	533	0	0	0	0	0	0	533	0	0
Sky Ala Moana	109	84	0	0	0	0	0	0	84	84	84

TABLE B-2, CONTINUED

PROJECT NAME	DPSA	TOTAL AFFORD. UNITS	AFFORDABLE UNITS COMPLETED		AFFORDABLE UNITS REMAINING					RENTAL PROJECTS	
			BEFORE 2020	2020	2021	2022	2023	2024	BEYOND 2024	TOTAL UNITS	AFFORD. UNITS
Skyline Honolulu	110	0	0	0	0	0	0	0	0	0	0
Sunset Beach Colony (by lot owners)	705	0	0	0	0	0	0	0	0	0	0
The Block 803 Waimanu	109	153	0	0	0	0	0	153	0	0	0
The Central	109	310	0	0	0	0	0	310	0	0	0
The Park on Keeaumoku	109	128	0	0	0	0	0	0	128	0	0
The Residences at Bishop Place	111	252	0	0	0	0	252	0	0	493	252
The Rise at Salt Lake	116	42	0	0	0	0	0	0	42	0	0
The Woods at Ahuimanu	501	0	0	0	0	0	0	0	0	0	0
Victoria Place	109	0	0	0	0	0	0	0	0	0	0
Villages of Kapolei (completed)	208	2,541	2,541	0	0	0	0	0	0	0	0
Wai Kaloi (Palehua East B)	210	0	0	0	0	0	0	0	0	0	0
Waialae Iki V, Phase 2	402	0	0	0	0	0	0	0	0	0	0
Waianae Increment 4	804	8	0	0	0	0	8	0	0	0	0
Waikalua Bayside	502	0	0	0	0	0	0	0	0	0	0
Waimanalo Residential and Subsistence Agriculture Lots (DHHL)	504	175	0	0	0	0	0	0	175	0	0
Waipahu I & II & Hoolulu/Kamalu Redevelopment (HPHA)	302	740	0	0	0	0	0	0	740	740	740
Waipahu Rentals	302	570	0	0	0	0	0	0	570	570	570
West Loch Affordable Housing	202	123	0	0	0	0	0	0	123	123	123
West Loch Modular Housing	202	58	0	0	0	0	0	0	58	58	58